

DENTAL UNIVERSITY OF THE
THE DENTAL DIGEST



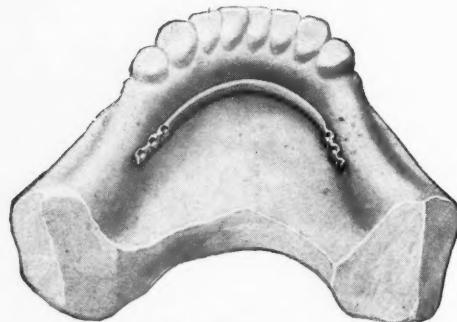
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THE DENTAL DIGEST

Vol. XXVII

OCTOBER, 1921

No. 10

The Dental Welfare Foundation

Most of our readers have already received, and we trust, have read the booklet issued by the Dental Welfare Foundation, which sets forth the plan to educate the public on matters dental.

For many years the need of acquainting the masses with the true facts relating to dentistry has been felt and a few sporadic attempts have been made, but not until the present movement has a practical plan been offered.

In view of the many difficulties which have always been present, it is not surprising to learn that this plan depends on the cooperation of the dental profession and the dental trade for its success.

Briefly, the plan is to mail one of twelve Health Talks, printed on postal cards, each month for one year, to a list of names furnished by individual members of the dental profession, dental supply depots, dental laboratories and dental manufacturers.

The service is furnished at cost, and is paid for by the subscribers according to the number of names they furnish.

We understand that many of the dental manufacturers and dental dealers have subscribed for one thousand names each. If ten thousand dentists subscribe for one hundred names each there will be a million cards a month and it is estimated that, with the subscriptions of dental dealers, manufacturers and laboratories and the large number of dentists who will subscribe for more than the minimum of one hundred names, there will be something approaching three million names on the final list. As the average family is estimated to have five members, something like fifteen million men, women and children will read these Health Talks every month during 1922.

The Dental Welfare Foundation presented its plan to the National Dental Association at the Milwaukee meeting which approved the text of the cards and appointed Otto U. King, D.D.S., General Secretary of the National Dental Association, as the Association's representative in the Dental Welfare Foundation.

It would seem that with such an auspicious beginning the movement were bound to succeed and to result in great good to all concerned.

Rather incomplete statistics put the proportion of population who never visit dental offices, except for extractions or relief from pain,

at 80 per cent. That such a condition exists is proof of a profound indifference to the benefits of dentistry, which is undoubtedly the result of ignorance.

To awaken this enormous percentage of our population to a realization of the danger of dental disease and to change their apathy to an interest in the health of their mouths is a tremendous task and one calling for vigorous measures if any beneficial results are to be expected during the life of the movement. And proof of the success or failure of the plan can only be found in the number of new applicants for dental service.

To educate the public on dental matters is one thing, but before the public can be benefited to any appreciable extent it will have to be induced to form new habits, and one of those habits is to have a periodical examination of their mouths by a competent dentist and such treatment and repair work done as may be indicated.

The statement that there are not enough dentists in this country to care for the dental needs of the people has been repeated many times and may be true, but we all know that thousands of dentists are not busy all of their office hours; that many who *think* they are busy, have many non-productive hours which amount to waste time; and that the majority of dentists could serve many more patients than they do, by systematizing their office activities, thereby benefiting humanity and themselves.

If the present movement to popularize dentistry results in such a demand that the profession cannot meet it, that problem will have to be met, and it is entirely possible that a serious effort will be necessary to induce high-school students to enter dental colleges in order that the ranks of the dental profession may be recruited to the number required to meet the demand for service.

Be that as it may, the Dental Welfare Foundation campaign has great potential value and will be watched with considerable interest.

One year is a short time to change the life habits of a people unless strong appeals are made to their primitive instincts. But as the desire for health or well-being is one of the most persistent emotions, no doubt the "Health Talks," which will receive such wide distribution, will awaken the public to a realization of the value of oral cleanliness and the influence of dental disease on the general health.

L. W. D.



Brother Bill's Letters



My Dear Nephew:

Your last letter is perhaps the most interesting I have received from you, because it shows that you are, probably for the first time, in a frame of mind to accept some of the things I have so long been trying to get into your perception. I do not believe that you are in position to get the full force of your own letter, because you wrote in the chatty way common between us, so I am going to rearrange its substance, because it will be more powerful in influencing your mind than anything that I could write. It will then be necessary for me to add only a few suggestions at the end. What you wrote can be summarized as follows:

Dr. B——, a dentist and friend, died recently at the age of fifty, leaving a widow and two young daughters. Because of your friendship, the widow, who believes you to be a successful business man, asked you to help her close up the estate, so that she can find out where she stands. You agreed, and have been for some days doing this after your regular office-hours. What you have learned has not only shocked you, but has given you material for some mighty serious reflection upon your own course.

Dr. B—— was a devoted husband and father, a man of fine personal character and a friend whom you admired and loved. He was a dentist of fine mind and unusual ability. He labored without ceasing to extend his professional knowledge and skill and to impart their benefits to his patients. He had a large practice.

The family lived comfortably, but not extravagantly. You always had the feeling that the whole family willingly shared in a program of deliberate economy.

You supposed, when Mrs. B—— asked you to help close up the estate, that there would be an estate to close. Your shock comes from finding that there is no estate worth mentioning outside the insurance. You are in the position of a man who sets himself to lift a heavy box and finds it empty. You summarize affairs about as follows:

There is a small, but comfortable and sufficient home, fully paid for, and needing no attention from you. The insurance company has paid to Mrs. B—— the \$5,000 due on the policy on B——'s life. The books in the office show that there is about \$750 due from patients, of which you think about \$500 is good.

You are much troubled because Mrs. B—— evidently thinks that the sale of the office ought to produce a considerable sum. She knows that much money has been spent in equipment and maintenance, and thinks that much of that value is still there. When you went into the office for the first time after B——'s death, it seemed empty and old and used up, not at all like it did when he was there. You realized then for the first time that while he was there and active, it had a good deal of value, but when he was gone, it was merely a collection of junk. The engine and chair and lathe and cabinet, though in good working condition, were old. Most of the instruments were badly worn. There were a few unopened bottles of amalgam and a little gold plate and solder, just as he left them.

You write that you were glad that you closed the door behind you and that the spring-lock caught, because you did not want anyone to interrupt your thoughts. What were you to tell Mrs. B—— about that office and how were you to tell it? No one would want that stuff. A new man coming to town without reputation could not afford to start with it. No dealer could give more than a pittance for it. No one needs to buy the office; all he needs to do is to rent the room. Practically all of the value that had been there until recently was in Dr. B——'s reputation and personality and ability, and these are gone forever.

And then you figured out Mrs. B——'s need for something big from that office. The taxes, repairs, and insurance upon the home would amount, at the very lowest calculation, to \$100 per year. The Winter's coal will cost another \$100. Mrs. B—— is a very sensible woman and has two sensible daughters. Together, they have done practically all of their own work, including much of the sewing. Dr. B—— had on hand money enough to pay the bills for his last illness and his funeral expenses and to leave Mrs. B—— \$200 in ready cash. The problem now is to maintain a place in which they can be

housed and kept warm and to provide something for them to eat and to wear.

Your banker tells you that if Mrs. B—— will invest the \$5,000 from the insurance policy and the \$500 you probably can collect from patients, he can probably, at the present time, secure her an income of 6 per cent with satisfactory safety. This will produce \$330 per year. This sum will pay the taxes, and insurance upon the house, buy coal for Winter, and leave 35 cents per day upon which to feed and clothe three people. You think that Mrs. B—— can take boarders or roomers and that the girls can leave High School and go to work. On the other hand, if Mrs. B—— does not invest the \$5,000 and uses only the income, but continues to live in a frugal manner, the principal, together with the earnings upon the unused portion, will probably be gone in about six years, at which time the family will be entirely without financial resources.

So this is what thirty years of study and work come to in B——'s case. He left a fine moral example and an honored name. His widow can take boarders to keep the family together and his daughters get out and hunt jobs.

But your most serious reflections do not arise from the question as to what Mrs. B—— and her daughters are coming to; they are much more personal and pertinent. You summarize them in the question, "What would my wife and children do if I were to die today?"

Your circumstances and B——'s were so similar as to be practically identical. As you seek to aid Mrs. B——, you feel as if you died and then had come back to administer your own estate. You are getting a chance to answer the questions which your wife would have to answer in case of your death. You are not so old as B—— was, but on the other hand, your children are not so old as his and so nearly ready to support themselves in case of necessity. Your home is of about the same value, but is not quite paid for. You carry about \$5,000 of life insurance. Until now, it has always seemed to you a



"—the glamour of your presence had vanished"

satisfactory sum, but in your new view of its pitiful inadequacy, it seems entirely too small. You have a few small, but not particularly profitable investments and a little money on hand. You can figure out a safe net income of about 50 cents a day for your four dependents, without consumption of principal.

Your letter shows very plainly the force of the blow you got when you went from B——'s empty office back to your own. You say that you stopped for a moment outside the door and tried to put yourself in the frame of mind of a friend coming in to do for your wife what you were trying to do for B——'s wife. When you entered, all the glamour of your presence and activity had gone. You saw how old and worn some of the things were, how largely their value depended upon your being there to use them. You realized the folly of expecting the office to produce, after your death, any considerable sum for the benefit of your family.

And then you ask several questions which I am going to list and answer in order.

Is this the logical end of a dentist's life? The answer is short and cruel. It is the logical end of any life planned as B—— planned his.

Must a dentist's widow lay aside her mourning to sweep for roomers or cook for boarders? She must do these or their equivalents, unless the dentist, during his lifetime, makes it unnecessary for her to do them after his death.

Your last question is the most important of all: How does it come that after thirty years of study and intelligent service, of hard work and frugal living, a life ends like this and leaves so heavy a burden for those who remain?

B——'s life ended as it did because he shaped it upon too narrow a conception of success. It had to end that way; it would have been extraordinary had it ended any other way. He accepted the conception, common with so many of our profession, that success consists in the acquirement of great professional knowledge and skill. Being a man of fine mind and high ideals, he so engulfed himself in this conception as to lose sight of the necessity, the amount and the manner of making adequate provision for his family. He probably accepted also, with equal devotion, the lopsided conception of ethics now common. Judging by what you say of his knowledge and skill, he achieved the end he sought. But this achievement took so much time and strength that he achieved little else. His conception of life was not broad enough to give sufficient space to his relations to his family welfare. He got only what he went after.

If B——'s conception of success had been broad enough to include all the major relations of his life instead of only one of them, his life



"—for my loved ones for a day"

dimes and a nickel, and, looking at them, you said to yourself, "Food, clothes, medical attention for four people for a day!" And then you added enough to bring the sum up to 50 cents and said to yourself, "Food, clothes, and medical care and education for my four loved ones for a day!" It is little wonder that you have been heavy-hearted since that time or that you are intent upon making that 50 cents into a sum large enough at least to pay for necessities.

You stand a chance of succeeding if you will enlarge your definition of success to include that 50 cents when increased to a respectable sum. This will not dismiss or displace or demean your conception of professional knowledge or sound economics, nor your pursuit of them. It will merely put them in their proper relation to your life viewed as a whole. It will take away their false values, but it will strengthen the life so much in other particulars as to make their true values more effective. There is more than one major relation in life even for a dentist.

would have been better balanced, probably happier, more valuable to his patients, and he would have been able to provide adequately for his family. When he was alive, you thought him a success; as administrator of his estate, you do not think his life successful; that 35 cents per day for his family makes it look like a failure in one of its most important particulars.

I have not written all of this to help B——. He is beyond the help of either of us. I have written it because I have been

trying to make your own words say to you what I have been writing all these years. You say that you took in hand three

Every man must decide how many such relations there are and what they are. For me, they include, among other things, sufficient financial provision for the family to push the boarders and roomers out of the picture and to make premature jobs for the children unnecessary.

Enlarge your definition of success to include all the major relations of your life.

Bill

The Business of Being a Dentist's Wife

Y husband has practiced for twenty years in the same town and has a practice that statistics show to be away above the average. We have been married fourteen years and my husband is kind enough to tell me that I have been a big help to him.

From the very first year of my marriage I have studied and worked to be the right kind of a wife for a professional man. It is a big job and one that takes time and thought to make it a success. I have certain rules that I follow carefully.

The one I give the most attention to is the one I call "Guard My Tongue." I know a young doctor whose career as a physician and surgeon is threatened with disaster through the unruly tongue of his wife. She not only talks about his patients but she quotes his opinions. Quite recently she told of his experience with a patient for the edification of an afternoon bridge party. Women went away and told the story, each one a little different version. The version I heard was such that the patient could have brought the doctor into court for libel.

I never try to boost my husband by talking about him and his work. One dentist's wife I know never loses an opportunity of telling in my hearing about how busy her husband is all the time. By so doing she shows the weakness of professional jealousy, for it is a well known fact that my husband is a busy man but I have never exploited the fact.

I keep away from my husband's office as much as possible during business hours. Patients do not like a man's wife hanging around an office. They wonder why she is there, and it puts some people under a restraint. They are liable to imagine things. For instance, years ago, I walked unannounced into my husband's operating room supposing that he was not busy as I heard him in the laboratory. A patient was in the chair. She was a woman whose reputation at one time had been attacked. The moment I left the office she asked my husband if I was

ever jealous. From that alone I could draw a lesson that it pays to keep away from the office. Let the woman imagine I was jealous and she would at once start a story that would not only hurt me, but my husband's business as well.

I advertise my husband by making sure that I always look my best. I wear up-to-date clothes and make sure that I am well dressed. By so doing people draw the conclusion that my husband must be doing well. And I run no bills. If I am not able to pay for a thing I do without it. I belong to no cliques or crowds. I count as my friends people from the highest social strata of our city, as well as those from the humblest walks of life. It makes no difference in my friendships if people go to other dentists. I was told the other day by a woman that Mrs. So-and-So had confided to her that she could not have stood up so well under distress if it had not been for my friendship. Her family and herself go to another dentist, but we have their good will. The good will of people counts for much in the success of a dentist.

I enjoy a certain amount of social life, but I do not make it of paramount importance in my life. I cater to no one. It is poor policy. The person who is catered to is liable to turn and do injury. I have seen it done. I am interested in local civics and politics and take an active part, such as holding an office or working on committees, but I am careful not to get in any mix-ups or factions. By this I do not mean that I am afraid to express my own opinions. That would be burying my personality. The attitude that I assume toward people, I feel is of great importance. I treat all people the same as much as possible. I try to remember names and faces and when on the street I make it a point to see people and speak to them pleasantly, but not with profusion. People are quick to note whether your bearing is real or assumed. But a smile and a pleasant word please all people.

There was a woman who had owed my husband for a long time. I met her in a store one evening. She tried to avoid me but I stepped up and spoke to her pleasantly. I found that she was going to a movie. I recommended one I had just seen and enjoyed. That was Saturday night, and Monday morning my husband received a check through the mail from her. She was pleased and wanted to stand well in my estimation.

I am nice to other dentists and their wives. I know of a doctor's wife who boasted of snubbing other doctors' wives. By this her husband's status in the town was weakened and her own dignity impaired. I was not surprised when I learned that he had not been able to make good, and had been forced to seek a new opening for work. I never repeat what I hear of other dentists' work in our city, nor do I pass an opinion upon any of it. Not long ago a woman called me up over the phone. I knew she was talking around the bush. Finally she

said: "Have you seen Mrs. A's new teeth?" I answered back that I had, but passed no opinion upon them. "They are awful," the woman continued. "When I need some I'll sure go to your husband." Did I rise to the bait? I did not. I returned that he was liable to make mistakes the same as any other dentist. "Is that the way you boost your husband?" she cried, and then began telling me something else. The woman is a talker. I gave her nothing that she could carry to the woman with the new teeth, or any one for that matter.

I have heard wives of professional men tell how they call down the office girls. This is poor policy, as it antagonizes a girl and then she fails to have the best interests of the office at heart. I do nothing like this, neither do I become familiar with her. I know one office girl who acquired knowledge concerning the domestic affairs of her employer through telephone conversations with his wife. She repeated them and it made talk.

Professional men and their wives are in the limelight to a great extent, especially in the small cities and towns, and they must be careful not to furnish food for gossip if they wish to maintain a dignified position and hold the respect of the people.

A psychologist might say that I help my husband through suggestion. I am positive that my husband is a fine dentist. In my mind there are no better, but I am not out boosting the fact with words. I believe that actions often do speak louder than words.



Meeting of the National Dental Golf Association

(EDITOR'S NOTE)—The article omits all reference to the great amount of work performed by Dr. Lewis, as Secretary of The National Dental Golf Association. The success of the dinner and the tournament was in no small degree due to the personal efforts which he put forth continuously during the year.

The National Dental Golf Association held its second tournament at the Blue Mound Country Club, Milwaukee, Wis., August 15, 1921. Entering this tournament were men from all over the United States



Picture taken from the 13th Tee, Blue Mountain Country Club,
Milwaukee, Wis., August 15, 1921.

and some of the scores turned in were very excellent considering that a dentist has so few hours in which to practice or play golf. Our regular first foursome composed of George W. Clapp, New York City, R. R. Gillis, Hammond, Ind., F. C. Warren, Los Angeles, and W. K. Bradford, Washington, D. C., opened the tournament at 7:30 A. M. with long drives, which were proven by Dr. Clapp's score turned in at the end of 36 holes. The day was a perfect one, the sun shining very brightly, and just cool enough to make it pleasant.

It is going to be a very difficult thing to secure courses for tournaments as large as this in the future. It will also be necessary for the

dentists attending these Conventions to belong to some golf club in order to play on the courses belonging to the Western Golf Association. Men desiring to play golf without a membership in a club will find it very difficult on account of the membership of most clubs being filled. Therefore, next year it would be advisable for each man to join a golf club and bring his card with him.

Foursomes started every five minutes from 7:45 to 11:45.

Preceding this tournament was held our annual dinner and we were able to accommodate 130 members, about 50 being turned away on account of not having made reservations ahead of time. It was the wish of the Secretary before this meeting, and was also stated in the circular letter sent out to each member, that he should not delay making these reservations because it is very difficult to run a tournament as large as this and have everybody happy and satisfied. It is also the wish of the Secretary at this time to ask the members desiring to play next year to kindly answer the letters which they may receive at their earliest possible convenience.

At this dinner Dr. Charles Benbroke, Los Angeles, conducted a Calcutta pool, which was very interesting, as it was new to most of the men in our Association.

Next year we will have our tournament in Los Angeles, and a group of enthusiastic golfers are making arrangements with different clubs for different men. In the course of time the members will receive a card stating at which club they can play and also at what time of day. This will not conflict with members playing on their own courses. The very most that we can expect from a private club is the courtesy of extending to its members the privilege of playing through, especially if the ball is lost or we are slowed up, thereby keeping the friendship of the club and not imposing on its members.

The prize winners for the tournament were as follows:

Best Net: First Prize—George W. Clapp, New York City, 134.

Second Prize—O. L. Whitson, Los Angeles, 137.

Third Prize—W. H. Roth, Chicago, 138.

Best Gross: First Prize—A. T. Grubb, Cleveland, 157.

Second Prize—G. T. Gregg, Pittsburgh, 160.

Third Prize—Fred Lush, Cincinnati, 162.

Best Ball Foursome:

Charles Hartley, Los Angeles.

F. M. Castro, Cleveland.

W. H. Spinks, Los Angeles.

B. Duffy, Chicago.

Most Threes with Handicap: D. B. Keyser, Chicago.

Most Fours with Handicap: W. H. Card, Minneapolis.

Dr. Grubb, Cleveland, is to be congratulated upon winning the championship two years in succession. We do not hesitate to say that Dr. Grubb this year was surely shooting some very wonderful golf and we anticipate that he will repeat this in Los Angeles next year. The more one watches Dr. Grubb play golf the more he is convinced that to make a good golfer a man must be temperamentally fitted for it and not carry the cares of his office onto the golf course. This is a lesson all dentists should learn in order to live long and be happy while they live.

RALSTON I. LEWIS,
Secretary and Treasurer.

Now a Certainty

Beyond computation and beyond knowledge, man's mind has wrestled with the problem of the origin of life.

In the particulars now supplied by bio-chemistry the actual steps by which the inorganic is converted into the organic, and life is thus kindled upon the earth, are definitely described. And in that description doubts long hovering are resolved, while what before was speculation is changed into scientific fact.

For though the belief that life had grown from matter, as a bud grows on the stalk, had been strengthening during many years past, and though many writers had made this assumption the basis of constructive advance, the possibility had always remained of denying a creed of the truth of which no definite proof could be adduced.

Henceforth, for reasoning men acquainted with the evidence, this possibility has vanished. Amongst such, never again while our present civilization endures, can doubt be felt on this point which touches the very source of man. As to remoter causes and as to later processes, knowledge must admit its present limitations and science must recognize the field awaiting further labor. But as to the fact itself, as to the certainty that from the inorganic the organic proceeds, the word *finis* is written at last beneath the long-sustained chapter of contention.

—*Nineteenth Century and After.*

Expansion or Extraction?

By T. M. Robertson, B.Sc., D.D.S., Coffeyville, Kansas

The picture of actual conditions often bear more weight than argument.

I am submitting the accompanying photographs as evidence, Exhibit A and Exhibit B, in the question of the advisability of extracting in Orthodontia.



Fig. A—Labial View—Result of Extraction of Superior Cuspids.



Fig. B—Occlusal View—Result of Extraction of Superior Cuspids.

The patient came under my observation at about 13 years of age. Orthodontic treatment was advised at the time, but the Dentocide got hold of the patient and removed the superior cuspids about a year after they had erupted in labial position.

The patient, a lady, came under my observation next at 24 years of age (ten years later); figures A and B show the result, a complete collapse of the superior Dental Arch.

Note difference in diameter of upper and lower arches, also occlusion, and the ideal conditions present to develop pyorrhea—which developed. Except for the locking of the anterior teeth this patient would have developed a prominent protrusion of Class III Malocclusion.



Fig. C—Labial View—Before and After Expansion—No Extraction.

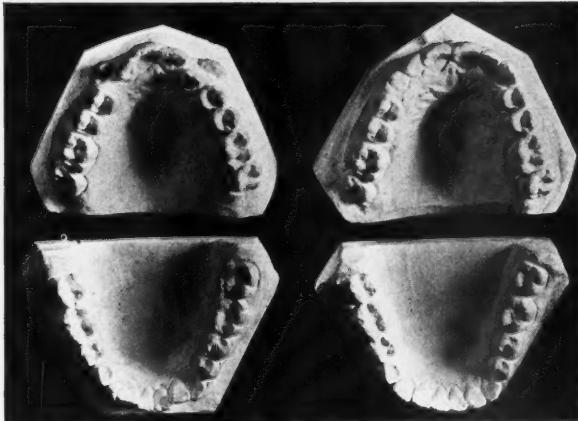


Fig. D—Occlusal View—Before and After Expansion—No Extraction.

Figures C and D, age 13, have been selected from my cabinet as being an identical case with A and B. This case was given the general expansion treatment, using the Angle Ribbon Arch.

The fallacy of the brick layer to restore the contour of a broken-down arch over a window by throwing away the keystone brick and expecting the pressure of the surrounding walls to restore the arch, is no more apparent than the fallacy of the dentist who, disregarding the forces tending to produce Malocclusion, throws away some of the teeth.

Rajahs as Patients

By George Cecil, Paris, France

IME was when the Rajahs and other native Princes—and princelets—of India paid little attention to their teeth. If a tooth aches, was it not the will of Allah that man, be he Rajah or humble peasant, should suffer? So His Highness pinned his faith to poultices of herbs and all kinds of astonishing fomentations, into which aromatic essences of far-reaching sweetness were introduced. These "pleasant stinks," as a learned Calcutta native Master of Arts has described the odorous poultices, had the effect of soothing the pain, though, alas, but temporarily. Consequently sooner or later the exalted patient and the offending tooth had to part company.

And the modus operandi? Well, in the earliest days of elementary Indian dental science, brute force, pure and simple, was used, the tooth being chiselled out. In the chiselling process the tooth on either side naturally became loosened, often to the Rajah's great indignation and to the detriment of the operator who was cast into a dungeon for having dared to take liberties with the potentate's august person. Indeed, in those far-off days the native practitioner's calling was fraught with danger, should royalty honor him with its patronage.

RETRIBUTIVE JUSTICE.

With the march of time, a wider horizon was opened up. Deserting the chisel for the mallet, the down-to-date native dentist placed a piece of wood against the offending molar and with a skilful blow of the mallet, out came the tooth. Though scarcely painless, the operation at least was expeditious. In the event of more than one blow being found necessary, other blows usually followed—upon the bared back of the inexpert dentist. The native prince, you see, was all-powerful, his word being law and his hand heavy, while the punishment was made to fit the crime.

The Great Pan-Jan-Drum exercised seigneurial rights over his subjects. If it pleased him to do so, he could depose the Diwan (Prime Minister); cause one of his faithless wives to be sewn up in a sack and pitched into the nearest river, and flay alive a creditor who had the temerity to press too insistently for a settlement of an account which had been outstanding for years. The monarch, in short, was all powerful.

It is on record that a certain dentist being notified that his attendance was required at the palace, betook himself to a distant village, sending in his place a willing but inexperienced substitute. Learning that the infuriated patient's agonies had been prolonged by two extra taps, the trembling principal speedily made preparations to depart for

another country, hoping like Jock o' Hazeldean, to be "ow're the border and far awa'" before retributive justice could overtake him. But the ill-starred one hoped in vain. Scarcely had he mounted the waiting camel that the Rajah's body-guard appeared and bore him back in triumph. He was sentenced to lose four teeth and the executioner instructed not to hurry over the job.

WESTERN INFLUENCE

Meanwhile, time went on, bringing in its train the good missionaries from England. Having a smattering of medicine, they introduced the now happily obsolete "key" instrument. The Rajahs, however, objected to it, holding that with a well directed blow from a mallet the time limit of pain was greatly reduced. So, not unnaturally, the well-meaning missionaries were turned out of the native states in which they had taken up their comfortable quarters and the mallet experts restored to favor.

But not for long. Western influence gradually crept in and many a colored ruler, throwing caste prejudices to one side, invited the attentions of the American and English dentists who had settled in the East. Decaying teeth, instead of being extracted, were skilfully filled. Bridge-work became popular and the Prince who could boast of a gold crown or so was the envy of his fellows and the joy of the harem. "The time draws nigh for the morning visit of the light of our eyes. O my sisters, let us not forget to praise the August One's new gold tooth which the foreign hakim from across the black water has so cleverly planted amidst the pearls in that mouth from which naught but wisdom proceeds. Say, O Moti, lucky art thou to have attracted our Gracious One's attention. Should he offer his Heart's Delight a gift, ask for a tooth of gold. There may be richer gifts, but none more delectable. Hark, Inyat, the chief eunuch, announces our Lord's arrival! On your knees, O my sisters; your faces to the ground and raise them not till the Heaven Born One gives permission—or fear the slipper!" Thus the simple souls of the seraglio.

A ROYAL SUMMONS

Although now-a-days the Rajah is far too enlightened a person to put in jeopardy the life of his dental attendant, some thirty years ago conditions were very different, the Indian potentate, never having got over the shock caused by the painful "key," distrusted the English dentists. So, when the Amir of Afghanistan instructed his agent in India to send a qualified white practitioner to Cabul for a month, there was little competition among the professional element.

"None of the Christian dogs will leave their practice," wrote the distracted agent, greatly fearing the wrath of his quick-tempered master.

Back came the answer, short and none too sweet: "Offer a lac of rupees; say that a safe-conduct will be provided for the journey to Cabul and back, and tell the accursed infidel that we swear by the blessed Koran and by the bones of our forefathers not to touch a hair of his head. If he is not here within four weeks, on your eyes be it."

The affrighted agent, knowing his Amir, and wishing to retain the blessed gift of sight, bestirred himself anew. This time he was more fortunate, the *lac* and the safe-conduct did not long go abegging, and within the stipulated time a cavalcade of wild horsemen with the dentist and his paraphernalia arrived at the great gate of Cabul. Received with a band of very brazen instruments, flag-waving and fireworks, according to the custom of the country, the trembling visitor was housed in a white-walled bungalow about which flowering creepers clustered. A view of the distant snow-capped mountains greeting him when he awoke the next morning to the penetrating and discordant sound of braying trumpets and monotonous tom-toms. The inhabitants welcomed him, and all the town was *en fete*.

A NERVE-RACKING EXPERIENCE

For a time everything went well. Day followed day without anything happening to agitate the intrepid traveller. He filled and crowned teeth by the dozen, his progress being reported every evening to the Afghan doctors, who were wild with envy. Indeed, the court dentist who probably retained his post owing to the fact that the Amir had never had occasion to have a tooth drawn, daily turned green with envy. The villagers for miles around hung about the bungalow in the hope that the accursed "Feringhee" (such is the native's pleasant way of describing those who are not of his own religion) would put a stop to their aches and pains. He did so; and if the extractions were painful, they at least were so expeditiously performed that the sufferers often were too surprised to cry out. When, finally, the magician, who was accompanied by a native mechanic, made a double plate for a toothless old "lumbadar" (village headsman) the whole countryside acclaimed him. He was a god, a luminary, a healer among healers.

The day before the brave dentist's departure for rose-embowered Peshawar, the frontier "station" from which he had set out, the Amir himself was attacked with a toothache. The trouble was, in fact, of long standing, having made its appearance intermittently—to be checked by the court "dant wallah." This time, however, His Highness was in paroxysms of anguish. Refusing the proffered assistance of his regular attendant, and with an abruptness doubtless brought about by intense suffering, he angrily bade the minion begone. "Bring me," thundered the distracted possessor of the aching tooth, "the Christian dog. It is my will."

To hear was to obey; and within an incredibly short time, the great Dost Mahomed, before whose frown all men trembled, was sitting in a gilded chair, with face distorted by pain and his body shaking in apprehension. For he had heard that an extraction was, at best, a disconcerting business, and being a good Mahometan, an anaesthetic was forbidden by his castiron-bound religion.

"Open, please." The circle of armed retainers leaned forward aghast at the spectacle of the finger and thumb of an infidel being inserted in their august Ruler's mouth.

"Tell the Amir," quavered the operator, his teeth chattering and his knees knocking, "that it is too far gone to fill, and beg him to have gas, as I have no cocaine needles."

At the mere suggestion of gas, Dost Mahomed leaped from his throne as if he had been sitting on a scorpion. "The dog," he roared, "am I to be insulted? Would that I had not given my royal word for his safe return. Bid the ferringhee do his business."

"Open, please." W-r-c-h! Out it came and the Amir, with an angry squeal bounced almost ceiling high. The swarthy faces of the attendants looked unutterable things, as they hurriedly consulted together as to what should be done to the wretch who had dared hurt their much dreaded master and drawn his blood. Hands were laid upon the sharp yatachans which they wore in their jeweled belts, while the circle closed round the inoffensive and unarmed dentist.

Luckily at this juncture the patient recovered himself, "Dogs," he bellowed (in Afghanistan everyone is a "dog" in his turn) "let him go. Give him his escort and bid him begone to India." When the present scribe last saw the hero of this interlude, whose hair had visibly whitened during the ten minutes which followed the royal extraction, the Amir had just offered him another lac to pay a return visit to Cabul. He was, in classical English, "not taking any, thank you."

CHAMPAGNE AND DANCERS

Today the Indian Prince is an enlightened person. When in Calcutta, Bombay or Madras, he visits the European dentist of his choice, or he might invite him to come to his palace where, in the intervals of attending the princely patient the guest is regaled with champagne and naucht dancers. The Rajah who, like so many of his kind, spends part of the year in London, Paris, Monte Carlo and elsewhere on the playgrounds of Europe, consults a local practitioner and, not being in his own country, is forced to pay the fee. In India it is extremely difficult to squeeze a farthing out of him. Sue the rascal in his royal territory and the native judge, fearing to lose the comfortable appointment finds the case non-proven. Indeed, so unsatisfactory a client is the Rajah that the dentist, in self-defense is obliged to charge him

treble and even quadruple the usual rate. And, even when payment finally is made the money has filtered through so many hands that the creditor may not touch more than one-fourth of it.

First of all the long suffering dentist has to beard the Rajah in his den, or in other words, to get hold of the paymaster, and this means a more or less expensive journey. Having arrived he must spend two or three days at a hotel, devoting the time between meals to gain the ear of the man who handles the money. This can be done only by bestowing Buksheesh in every direction. The suppliant is forced to go from door to door dropping rupees into a dozen itching palms.

Finally the holy of holies, the private room of the bukshi (treasurer) is reached. "What is your will, O doctor Sahib?" politely enquires the keeper of the privy-purse.

"The Rajah owes me 5,000 rupees for professional services, and the account has been outstanding as many years as there are rings on your fairy fingers."

"By your honor's favor, I cannot at this moment attend to the matter. The Rajah goes hawking at ten hours and I am bidden to accompany him. Return, I pray you tomorrow at dusk and I will see to the business."

Inwardly cursing the villain, who is probably lying, the exasperated—but tactful—caller bows to the decision and later presents himself at the agreed time.

"The bukshi-sahib has not told me that he expects you. Moreover, he is engaged upon important business and I dare not disturb him. He would have me beaten—perhaps worse."

Fuming at the waste of time, the much-tried dentist, fingering a fifty rupee note, says gently but firmly, "O doorkeeper, these are foolish words. Gain me admittance to the Presence and this large sum is yours." Five minutes later he is in the paymaster's office.

After much conversation, interlarded with compliments expressed in the highfrown Oriental metaphor, the account is paid, minus a trifle of 500 rupees. In counting over the amount, a note for this sum is missing. The dentist says nothing, the bukshi, with a smile which is childlike and bland, offers his visitor a native made and very nasty cheroot. They understand each other perfectly.

"Unprofessional and undignified," you will say. It is, but unfortunately there is no other way of getting paid. And, when the loss of interest, loss of patients owing to absence from business and buksheesh have been deducted, the 5000 rupees have dwindled down to 2000.

BIRCHED INTO SHAPE

Happily, all Rajahs are not alike. The younger generation, having been birched into shape at an English public school, consider it *infra dig*

to owe their dentist money. So, upon being presented with the bill, the private secretary, often an Englishman, has orders to send a check by return mail. "And," will add the Rajah, "ask him to accept a box of those cigars which I got in the last mail. He's a first-rate fellow. I must ask him to come for a week-end's shooting."

The older school, however, holds very different views, the unpunctual settlement of a debt being one of them. As to writing checks, check books are practically unknown to the average Rajah. His financial affairs are in the hands of the diwan and the rapacious bukshi and no power on earth will induce him to interfere in the administration and expenditure of the revenue. Custom demands it of him and custom is the god to which he bends his knee.

Meanwhile, the dental surgeon, ever sanguine and cherishing the hope that he will see the money some day, gives his time and skill to the Rajah. And although such accounts sometimes cause more trouble than they are worth, few Anglo-Indian dentists die poor.

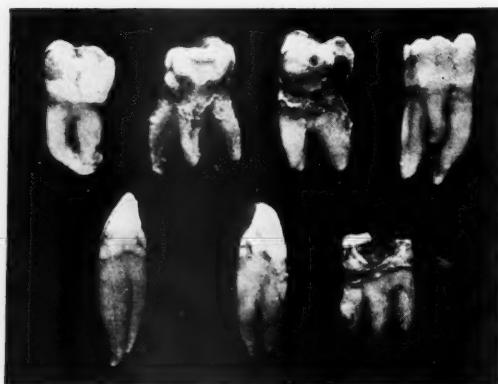
The Last Resort

By A. J. S.

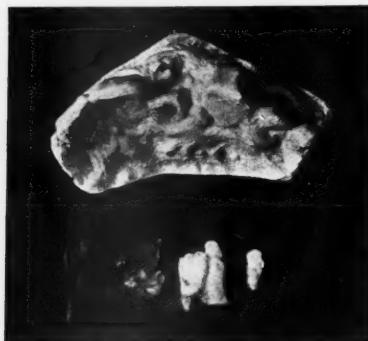
There is a modern medico, with methods most unique;
He tries the new discoveries that come to light each week:
He uses chiropractic, osteopathy and pills
And e'en resorts to scalpel to cure his patients' ills.
In endocrine derangements, a specialist is he,
And not averse to trying out glandular therapy.
He takes a thousand calories and puts them in a row
And evolves a balanced diet guaranteed to make one grow.
He educates new muscles to take the place of old
And never, never designates the "flu" as "just a cold."
But now and then he hits a snag and sends an S.O.S.,
And demands a diagnosis by a careful D.D.S.,
For his findings of neuralgia, and rheumatiz and such
Lack the requisite reaction to his educated touch,
And the ears, and eyes and tonsils, Wasserman and gastric tests
Lead him from a sure conviction as to where the trouble rests.
As he passes through the Hospital, his eyes light on a door
That says Oral Surgery Clinic—office hours 2 to 4;
And now his woes are over for there swiftly comes to mind
A wondrous possibility to which he has been blind.
He has dental cysts to choose from, abscesses, cavities,
Granulomas and impactions, and a kindred host like these.
"I am lost," he sadly murmurs, as he staggers down the stairs,
"If this last best bet has failed me, naught remains but fervent prayers."

Dental Anomalies

(Continued from September).



DR. C. W. PERCIVAL, St. Paul, Nebraska



DR. E. M. WHITSETT, St. Louis, Mo.

Thank You

We wish to thank all those who so kindly forwarded dental anomalies otherwise referred to as "freaks." So many came in that proper personal acknowledgment was delayed, but we hope to return all teeth to those who requested their return and for the present we shall ask donors to consider this an acknowledgment and expression of appreciation, and that no more need be sent until further notice.

DENTAL LAWS

Examination Acts in U. S. of America

By Alphonso Irwin, D.D.S., Camden, N. J.

CODIFICATION

(Continued from September)

NEBRASKA—LAW APPROVED 1905

High School Certificate or fourteen Carnegie Units. Dental degree required. June and November examinations in Lincoln and Omaha. License fee \$20.00. Practical requirements: one gold and amalgam filling, gold inlay, one crown, full upper and lower set ready for vulcanizing. Interchange with District of Columbia, Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Ohio, Tennessee, Vermont. Secretary Dept. Public Welfare, H. H. Antilles, Lincoln, Nebraska.

NEVADA—LAW APPROVED 1918

High School and Dental diplomas required. Second Tuesday in June and December examinations in Reno or Carson City. No interchange; law permits it; five (5) years' licensed practice in another state admits to examinations (clinical and prosthetic). Annual Registration with Board on January first. Address Sec'y-Treas., Wm. H. Cavell, Carson City, Nevada.

NEW HAMPSHIRE—LAW APPROVED 1919

High School and dental diplomas. June and December examinations in Manchester. Written examinations in anatomy and oral surgery, physiology, chemistry and metallurgy, materia medica and anesthetics, operative and prosthetic dentistry, pathology and therapeutics, histology and bacteriology. Practical examinations consist of gold and amalgam and synthetic fillings, inlay preparation (optional), soldering four-tooth bridge, one abutment being a Richmond crown; articulating either a full upper or lower set of artificial teeth. Fee \$20.00. Dental nurse examination, fee \$5.00. Interchange, "No formal agreement with any State." Examination about the last week in June, in Manchester. Registration with the Secretary of State and Secretary of

State Board of Dental Examiners. Secretary, H. L. Watson, 913 Elm Street, Manchester, N. H.

NEW JERSEY—AMENDED LAW, 1916

Approved four years' High School diploma or equivalent and certificate of State Supervisor of Public Instruction; also dental degree required. Interchange with Michigan, Vermont, and West Virginia. June and December examinations in Trenton. Radiography to be added in June, 1919. License fee \$25.00. Re-examination \$10.00. Written examinations upon subjects usually taught in a standard dental college. Practical test: Approximal gold filling with approximating tooth in position; compound approximal filling of amalgam, a silicate filling. Prosthetic tests: Taking of impressions, wax bite. Anatomical articulation of a full upper and lower denture (plain teeth) imbedded in wax on trial plate, must be submitted. Annual registration with the Secretary of the Board; fee \$2.00. Secretary, J. G. Forsyth, 429 E. State Street, Trenton, N. J.

NEW MEXICO—LAW AMENDED MARCH, 1907

Diploma from a dental college. No interchange. June examinations in Santa Fe or Albuquerque. License fee \$25.00, certificates \$10.00. Practical requirements: gold, amalgam and cement fillings, gold inlay, crown and bridge work, plate to point of flasking. Examination in Albuquerque. Annual registration with Secretary; fee \$3.00. Secretary, A. J. Moran, Deming, New Mexico.

NEW YORK—LAW AMENDED, 1917

Four years' registered High School or equivalent, 72 Regents' Counts, and dental diplomas required. After January 1, 1921, a diploma from a four years' course registered dental college will be necessary. September or October and June examinations usually in New York, Albany, Syracuse and Buffalo. License fee, \$25.00. Theoretical examinations in anatomy, chemistry, metallurgy, operative and prosthetic dentistry, therapeutics, and *materia medica*, physiology and hygiene, oral surgery, pathology, histology. No reciprocity at present. Oral Hygienists (females) examined and licensed; fee \$5.00. Examination simultaneously June, July, October, in Albany, Buffalo, Syracuse and New York. Six-year clause exempts from written examinations. Registration with clerk of initial county of practice. Annual re-registration with the Secretary of the Board prior to September 1st; fee \$2.00. Secretary, Minor J. Terry, Education Building, Albany, New York.

NORTH DAKOTA—LAW AMENDED 1915

Entrance requirements for state university or four years' High School and dental diplomas. Examinations, second Tuesday in January and July, in Fargo; fee \$25.00. Practical requirements: The making of gold foil and amalgam operations; a gold crown and a porcelain crown; and a set of full upper and lower teeth. Reciprocity with those states having and maintaining the same requirements. Reciprocity fee \$50.00. Renewal registration with the Secretary of the Board before July 1st each year, fee \$2.00. Secretary, W. E. Hocking, Devils Lake, North Dakota.

NORTH CAROLINA—NEW LAW, MARCH, 1915

High school or equivalent, dental degree; January and June examinations in Durham, but place not permanent. License fee \$20.00. No reciprocity. Practical examinations consist of one gold, one amalgam, and one enamel filling; also models of an edentulous mouth upon which applicant will be required to set up and articulate a full set of Trubyte teeth. Examinations announced; but usually held in Wilmington, N. C. Registration with Clerk of Superior Court and Secretary of Board. Secretary, F. L. Hunt, Asheville, North Carolina.

OHIO—INSTRUCTIONS TO APPLICANTS**TIME AND PLACE OF EXAMINATION**

The Ohio State Dental Board will meet for the examination of applicants on the fourth Monday of the months of June and October in the city of Columbus.

The Board will hold examinations in Practical Operative and Prosthetic Dentistry at the Cincinnati and Ohio Dental Colleges in Cincinnati, at the Western Reserve Dental College in Cleveland and at the Ohio State University Dental College in Columbus sometime during the months of April and May of each year. Due notice of the exact dates will be given to the various Deans of the various colleges by the Secretary.

Only Senior dental students, who are assured of graduation, are eligible to take advantage of these examinations. The fee, required by law, is payable at this time. The grades in this work will not be considered until after the regular examination in June.

QUALIFICATION OF APPLICANTS

1. The applicant must be at least twenty-one years of age.
2. He must be a graduate of a reputable dental college, recognized by the Board.

3. He must furnish a satisfactory certificate of good moral character.
4. He must also be able to present with his application a certificate from the State Superintendent of Public Instruction that he is possessed of a general education equal to that required for graduation from a first grade high school in this state.
5. If an applicant has been convicted of the illegal practice of dentistry in this state, the Board will refuse him the right of examination.
6. An applicant, to qualify under our reciprocity agreements, must be a graduate of a reputable dental college and must have practiced ethically at least five years in a state, territory or district of the United States with which Ohio enjoys reciprocity. He must also file an application with the Ohio Board and receive an endorsement from the aforesaid state, territory or district in which he has practiced. This endorsement entitles him to credit for the theoretical examination and it is then necessary for him to take only the practical examination.

MANNER OF APPLICANTS

All persons desiring to practice Dentistry in the State of Ohio must comply with the following rules and regulations of the Ohio State Dental Board:

1. Each applicant must file with the Secretary of the Board an application (verified by oath) at least ten days previous to the date of the examination; the application to be made out on a form furnished by the said Secretary.
2. A fee of Twenty-five (\$25.00) Dollars must also accompany this application.
3. The remittance must be in the form of a Post Office or Express money order or a New York draft and should be made payable to the Ohio State Dental Board. (No personal checks accepted.)

EXAMINATIONS

The hours for examinations shall be from 8:30 A. M. to 12 noon, and from 1:30 P. M. to 5 P. M.

The examinations in the following subjects shall be in English (either written, oral or both): Anatomy, physiology, chemistry, materia medica, therapeutics, metallurgy, histology, pathology, bacteriology, prosthetics, operative dentistry, oral surgery, anesthetics, orthodontia and oral hygiene.

The Practical examination shall consist of the insertion of at least one gold filling, one contour approximal amalgam filling, one silicate approximal filling, one contour approximal cast gold inlay, the making of a porcelain faced crown (Richmond) and the setting up and articulating of a full upper and lower denture.

Written Examinations. For these examinations the applicant must furnish pen and ink. Paper will be furnished.

Clinical Operative Dentistry Examination. Each applicant must furnish a patient, engine, instruments and all material. A chair will be provided.

All cavities to be filled must be selected or approved by the Board, and each member of the Board must be called to inspect and grade the work after each of the following steps:

- (a) Preparation of cavity.
- (b) Introduction and condensation of gold.
- (c) Completed operation.

The Board at its discretion may substitute an additional gold filling in place of an amalgam.

Clinical Prosthetic Dentistry. Each applicant will be required to furnish plaster casts for a full denture (both jaws) from impressions taken from the same mouth. Also the bite mounted upon an anatomical articulator, and full upper and lower set of porcelain teeth.

He is also required to furnish the root of a tooth and all materials necessary for the making of the "Richmond Crown."

The President of the Board will announce at the time of the Prosthetic Examination the particular steps of this work that all members of the Board will inspect.

Previous to the opening of the examination, the applicant will be furnished with an envelope, containing a numbered pledge card, which he must sign. He must then seal the envelope and use the number on the card in place of his name on all examination papers. The envelope must be returned to the Secretary.

Any applicant detected in attempting to give or receive aid, will be dismissed from the room and his work rejected.

GRADING

An average of at least 75 per cent will be exacted in the theoretical branches and of 80 per cent in the practical work.

If the applicant should receive a grading of less than 40 per cent in any one subject (granting that his general average would pass him) he must take another examination in that particular subject at the next regular or special meeting of the Board.

An applicant who has practiced Dentistry ethically for five years, shall be given five points credit and one point credit for each succeeding year of practice. This to apply on general average in theoretical examination only.

RE-EXAMINATION

An applicant failing at the first examination may be re-examined at "the next regular examination of the Board" without an additional fee, provided he notifies the Secretary by letter at least ten days previous to the examination.

PRACTICAL HINTS

This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. To avoid unnecessary delay, Hints, Questions and Answers should be sent direct to him.

THE GOLD BASE.—Our duty to our clientele is service, but it is also education. Here are some reasons why we should recommend the gold base:

1. It is thinner, stronger and more sanitary than vulcanite.
2. It is one of the best thermal conductors, and aids the taste of hot and cold drinks and foods.
3. Rubber deteriorates in the mouth; it is of vegetable composition, is treated chemically and its deleterious effects vary from slight irritation and engorgement of the tissues to systemic disturbances.
4. The same sense of well-being that prevents our clientele from living in a shack, driving a mule, and wearing jeans and calico, should prevent them from wearing the cheapest make of teeth on a cheap rubber base.

Let us educate to the best service.

KENT K. CROSS, D.D.S.

AIDS TO BETTER RESTORATIONS.—Often, in constructing dentures or in referring cases to the prosthodontists, we fail to avail ourselves of the following aids to better restorations:

Make impression with natural teeth in central occlusion. Include palatal surface for necessary restoration of rugae and surfaces around teeth.

With aluminum wire, make measurement of face at median line with natural teeth in occlusion; then cut profile on cardboard for reference. (Suggested by Dr. Gillis, Hammond, Ind.)

Procure or make photograph showing full front view, profile, and if practicable, close up front view with natural teeth exposed. (Suggested to me by the Practical Hints Editor.)

Labial plate of process should be trimmed, especially where prominent, as in region of cuspids and tuberosities.

A scrap book of pictures of people, with teeth exposed is suggested to show patients that "good looking" people do not usually have small, evenly arranged teeth. (Suggested by Dr. Horner of Pittsburg.)

KENT K. CROSS, D.D.S.

Editor Practical Hints:

Can you advance any reason why a tooth after removal of pulp from canal should be painful near apex when probe is used to insert dressing? Pulp removed under fairly aseptic conditions.

I devitalize with devitalizing paste, which I allow to remain sealed in cavity for upwards of four days, dependent upon the age of patient. The dressing is removed when patient next reports for treatment. At this sitting, pulp chamber is freely opened with large round bur, washed with warm water, dried with alcohol, and the paste is sealed in tooth and allowed to remain for upwards of three days before extracting pulp. I shall be grateful for any help in this particular.

G. B. G.

ANSWER.—I do not believe that pulps should ever be removed with any devitalizing paste. Immediate extirpation under novocain anesthesia, with the placing in the canal of a soothing, loose dressing, with the filling of the canal at a subsequent sitting I believe the best procedure where devitalization has to be resorted to; though practically no teeth should be devitalized unless pulps are diseased or partially disintegrated.—V. C. S.

Editor Practical Hints:

Noticed in Digest reference to bite-plate or splint for raising the bite. Wish you would give some idea how to make and how to use. Have several cases on hand, and have made several cases, but have never used bite-plate or splint.

A. R.

ANSWER.—To make the rubber splint referred to, take a full upper and lower impression and mount models on articulator and lay a sheet of wax over the teeth of either the lower or upper jaw. I usually prefer the upper because the splint is less conspicuous there. Carry the wax to the gum line or in case of very badly worn teeth extend splint on over gum tissue somewhat. Cut it back of cuspids so that splint extends across the lingual of incisors but not on the labial surface. Close articulator so that lower teeth leave an impression in the softened wax which should be built up to the thickness that you wish to have the splint open the bite. These splints can sometimes be worn without cementing or they can be cemented with gutta percha or temporary

cement, to hold the jaws apart to establish the habit of the open bite position. As your inlays, crowns, bridges or other opening the bite fixtures are finished, the rubber can be cut away and the remainder of the splint still used to hold the bite on the opposite side.—V. C. S.

Editor Practical Hints:

1. Is Conductive Anesthesia generally to be relied on for the painless extraction of teeth?
2. What is the difference between Conductive Anesthesia and the Interosseous Method as taught by Dr. A. E. Smith?
3. Is it possible for one to do this work (Conductive Anesthesia) after watching others do it, as in an hospital clinic, or must one take a special course?
4. If a special course is necessary where would you advise me to go?

B. A. P.

ANSWER.—Conductive Anesthesia properly handled is thoroughly to be relied upon for the painless extraction of teeth as well as other dental operations. I would advise you to buy a book on the subject, study it carefully, and work out your technic from it. It would no doubt be better for you to take a special course under some good instructor, but if you are an ordinarily skillful operator and careful student I do not believe this is essential.

The interosseous method consists in penetrating the bony plate and injecting the novocain solution into the interosseous tissues adjacent to the roots of the teeth to be operated upon, whereas the conductive method consists in injecting into the tissues adjacent to the nerve trunks supplying the teeth.—V. C. S.

Editor Practical Hints:

Patient (girl) age 12; lower first molars imperfectly calcified, putrefaction having set in the one on right side; second molars in on both sides; teeth rather large for size of arch, and crowded. How would you treat the above case?

Case No. 2. Patient age 40; good health; lost all upper teeth from Rigg's but right central and lateral incisors, also right cuspid; on the left side have the lateral with a bridge carrying central; these teeth are ill kept, but firm. What would you advise in the way of a replacement of lost teeth?

B. E. T.

ANSWER.—If you mean by "Putrefaction having set in" that the pulp is putrescent, I should advise extraction of the molar on the right side. The one that is imperfectly calcified or merely decayed should

be repaired. The fact that the teeth are crowded would not justify the extraction of the first molars excepting in case of loss of pulp, as I think it rarely, if ever, occurs without orthodontic procedure that in such a case the second and third molars will come forward without tipping with loss of contact both approximally and occlusally.

Case 2: Would advise the extraction of all remaining upper teeth, as I think there is little advantage in the retention of but two or three anterior teeth in the upper jaw unless both cuspids are in place to maintain normal facial contour. This, of course, is especially true in a neglected mouth with patient confirmed in the habit of uncleanliness. On the lower jaw I would by all means advise against extraction of the remaining teeth. Clean them up as best you can, and try to induce the patient to keep them so and make a lingual bar plate with attachments to the cuspids. With conditions the same, in considering the upper and lower jaw, I think we should be much more conservative in the extraction of the scattered remaining teeth in the lower than in the upper jaw, for the reason that a full lower plate is usually much harder for the patient to learn to wear and in every way less satisfactory than a full upper.—V. C. S.

Editor Practical Hints:

Can you suggest a prescription that will correct "Ropy Saliva"? Is a permanent correction possible? I need this information preparatory to doing some denture work.

H. R. S.

ANSWER.—The ropiness of saliva can be corrected temporarily at the time of taking impressions by having patient rinse mouth with a fairly strong acid solution. I use a few drops of either nitric or sulphuric acid in a glass of warm water. Thick viscid saliva is usually due to the presence of infection in the gums or in the glands or to faulty elimination in the alimentary tract. It can usually be remedied by cleaning up the infection in the mouth, if present, or by correction of the food habits by the eating of more fresh vegetables and coarser breads with less heavy concentrated foods.—V. C. S.



DENTAL ECONOMICS

Why Do We Practice Dentistry?

By W. R. Rodenhauser, Ph.G., D.D.S., Ordway, Colorado

It seems to me that to start off a virgin society properly, the first thought or object was to find out just why we chose this profession for a livelihood, and why we so continue to remain in it. I was requested to bring out some points for discussion, so I herewith present you with one; you can make as much or as little out of it, in proportion to the way your dinner agrees with you. It may go against some of our teachings, but here it is.

Men practice dentistry to earn a living and a competency. Most of us decided when we were choosing a business or a profession, that dentistry would present an agreeable, easy and remunerative field for our future endeavors; that was our only thought. After we entered college we were taught ethics, serving mankind, laboring only for the good of our fellow man, and the rewards would take care of themselves; we were not taught one thing about the business side of our profession, could not tell what a certain operation was to cost, decided that a dollar for an amalgam filling was profit—material only costing a fraction of one cent; we knew nothing about overhead; such facts as depreciation, interest on investment, retiring debt, human factor, etc., were uncoined words. There were 365 days in the year, 10 or 12 working hours in each day; a filling only took 20 or 30 minutes; there was, say, one dollar for a half hour's work, and we knew that the day had 20 of such half hours.

A crown only took about an hour and a half, and we received about, say, \$8.00 for it; and we could make five or six out of a sheet of gold; it looked easy money. But—and let's make it a big "BUT"—our bills were being stamped "past due," and when we wanted to take a day off or a trip we happened to be short. Those sure were the days; we were benefactors of mankind, but did not quite realize nor get the benefit of our charity.

As we began to take on responsibilities and assume obligations we saw light, one of the lesser lights, 'tis true, and we began to figure expenses; at this time it was only the visible expenses. Then things

eased up for a little; very soon our outgo overtook our income again, and we cried out for more light.

Our questionings took this turn: In spite of our professional training, our investment and our valuable services, do we earn enough more than a plumber, or any high-class mechanic, to support us in a proper form and save as he is saving against old age?

Do we see nothing but increasing activity, the dependence upon daily and weekly and monthly earnings, for as far ahead as we can see? And then become dependent upon others?

What is to happen if you earn less than you do now, or if you are ill and can earn nothing?

The following also made its appeal at this time: "The financial condition of the average dentist in full practice is not such as to attract to the practice of dentistry, men of the calibre who would most advance the welfare of the profession and of humanity; they can do better financially elsewhere."

I then saw that the solution to the problem was in answer to this question: "How can I be sure of a profit on this particular service and how much should the cost be to the patient?"

My solution is found in the following table under the heading:

ITEMS OF COST TO RENDER DENTAL SERVICE AT MINIMUM FEE

GENERAL EXPENSES

Rent	\$400.00
Assistant salary	520.00
Taxes	15.00
Health and accident insurance	108.00
Liability insurance	30.00
Light and power	60.00
Gas	15.00
Telephone	72.00
Clinics	100.00
Printing and Stamps	60.00
Upkeep and breakage aside from general depreciation	75.00
Laundry	72.00
Care	10.00
Charities	50.00
Dental Society dues	5.00
Journals and magazines	15.00
Fire insurance	26.00
Laboratory, vulcanizing, etc.	160.00
Merchandise and miscellaneous	350.00
Uncollectible accounts (yearly average less)	200.00
Commission to attorney for collections	100.00
Materials	365.00
Precious metals	330.00
Teeth, facings and packings	260.00
	<hr/>
	\$3,398.00

FIXED EXPENSES

10% depreciation on \$2500.00 (invoice)	\$250.00
10% interest on \$7500.00 investment (invoice and education)	750.00
Retiring debt, 4% per year on education	200.00
10% on average outstanding monthly accounts	120.00
Human factor, 10% of general expense	365.00
Salary	5,000.00
Fixed expense	\$6,685.00
General expense	3,398.00
	\$10,083.00

Days in a year	365	
Holidays and Sundays	58	
	—	
	307	
18 Half Holidays	9	Time lost as non-productive.
	—	
	298	Telephoning
Vacation	24	Correspondence
	—	Examinations
	274	Contracting
Convention	6	Consultations
	—	Adjustments
	268	Recording of operations.
Hours per day	8	Tardy appointments
	—	Broken appointments
Total hours per year	2144	
Average time lost per day	3½ hrs.	
	268 days	
Non-productive hours	938	
Total working hours	2144	
Non-productive hours	938	
Total productive hours	1206	

Total expense divided by the number of productive hours gives the minimum fee per hour. \$10,083.00 divided by 1206 hours equals \$8.36 per hour.

The foregoing fixed expenses applies to most of the dentists present, and the general expense will figure very closely with any of your income tax returns, except the item of salary which any dentist can figure to suit his needs.

If we do not adjust our fees to earn a predetermined amount annually, we can make no provision for a depreciation fund or for refunding the investment, and the results are that we put into our personal account as remuneration and expend for personal use the amounts which should be set aside for these items.

The serious results are that we appear to have a much larger personal income than we really have, and the loss is the amount invested for equipment and education, and we have to pay for replacing the equipment out of our personal expenses or go without, and usually our personal account is well drawn upon.

In fixing fees the following suggestions will prove helpful:

The cost of an operation increases with the increase in practice.

The hours a dentist works at his regular fees are income hours.

The cost of an operation is obtained by office expense or overhead (general or fixed), plus remuneration; increased office expenses change the cost of any dental operation from year to year.

Our increased expenses are brought about by higher rents, more expensive equipment, putting aside larger sums for depreciation, and newer improvements in methods taking more time, although working at the same speed.

Every ten years our Government spends millions of dollars to take the census of the people and what they are doing. It is a costly undertaking, but it is worth more than it costs. Important conclusions gleaned from the figures gathered, because of the data, are accurate and scientific. These facts become a basis for remedial legislation and for various movements for the uplift of the nation and the race.

These facts may interest you. Seven-eighths of all the money left by married men in America for their dependents is derived from life insurance. Ninety per cent of the men engaged in active business fail to reach old age with a competence.

Nineteen out of every twenty persons fail to provide for their old age or for their families. Eight million women are forced to earn a living. Thirty-five per cent of the widows of the country are in want. Ninety per cent of American widows lack life's comforts.

Eighty-two per cent of the children of the country are forced to leave school before completing the eighth grade, to aid in making a living for the family.

Woolridge-Miller Building.

Payment at Each Sitting

By G. E. C. Wilmington, Delaware

Your section on "Dental Economics" is interesting, and I suppose in main true, but when a story of a big success appears the failures seem to take exception to it.

How I came to be a dentist might be a bit interesting to relate. It all happened because I went to a boarding house on an invitation to

try the Sunday dinner, as at that time I was getting poor food. In this house were a number of students, and I came to envy them as the title of Doctor sounded pretty nifty to me who was working in overalls and with no apparent future. So I entered a first-class prep school at nights to get the High School credits. I got through in due time, keeping my job and attending school after work.

Well, I finally started on dentistry, working on the overall job and studying dentistry at the same time—and it was no cinch. It is surprising how a fellow can work eight hours a day earning a living and can study and get more knowledge than another whose parents send him to school. After getting through college I passed a few "State Boards," getting leave to take them.

The first "Sundown" office I had was in a classy office-building, the last place for a beginner to start. I took in \$35 in three months after five in the evening, and it would have made a great moving picture seeing me get out of this place ahead of the sheriff. The next place was a pip. The hallroom boys had nothing on me, as one room served as waiting-room, operating-room and bedroom combined. In this place the receipts were about \$400 for nine months' "Sundown" practice.

I then decided to pull stakes and I started in another state leaving the job which paid me \$100 sure a month, and it took me two days to get the place fixed up for work. I had less than fifty dollars as a starter but had the equipment and was getting it on time like others do. It sure was sweet waiting for the folks to try a new dentist.

This town had about sixty-five other dentists, and these hot air shooters made me sick. Every time I would see them they would tell me how they would turn the patients away, and I, in my ignorance, believed them. I told them business was rotten with me, and one time when I got the same "Bull" from one dentist about being busy for several months ahead and turning them away, I said that the next time he had to turn them away to shoot them in my direction; but he said he did not want to take a chance on a new man.

The first year in this town I took in \$1800 gross and had to live hallroom style. I was getting sick of sleeping on a couch for nearly two years, so when in the second year I got in two months that passed \$300 gross, I thought I would take a chance and get married.

Wonder who that fellow was who said "Two can live as cheap as one." The luck that followed—it's fine to think of it now. We took in \$750 the next four months, so I thought it must be time to move again.

I went to a small country town which did not have a dentist and fixed up a nice little place. This town, the postmaster said, had 1200 persons, but he was a liar too. The nearest dentist was eight miles

away and I estimated that I would be the nearest dentist to 4000 people, but that must have been one of my day dreams.

After we were in the place three weeks and I had taken in \$8, I decided it was no place for a live wire. You see I still had confidence in myself so I went back to the town I had left and got a place on the main street and decided to stick and see what would happen. These country people should be served by country dentists as city folks do not understand them. We think they are cheap but they just have to be that way. Nature is very unkind to the farmers at times, and coupled with ignorance and poor management life is just an existence for most of them. The only time they get dental work done is when they can't knock the tooth out with an axe.

The new place was in a busy section, and I was travelling at near the \$100 a week clip and getting more patients than I could land for contracts, so I sat thinking in the office one day and decided that I did not know the first thing about selling my services. I went to the library and got some books on salesmanship and after studying them one month the receipts jumped to \$200. I was so pleased that I said to my wife: "I have been a lifetime getting to this point; I wonder when we will hit it again." Not being content with just the salesmanship I thought I would study character reading to see if it would help me. In time I could almost guess a patient's address. Well, it turned the trick and in two years I believe that I was doing as well as the best man in town, according to the salesman, but "That is what they all say."

The most important thing I forgot to mention—that "Payment at each sitting" sign, and not making one exception in over four years. That is 50 per cent of dentistry, making the patients come across at each visit. It can be done in any practice if you have the will power. Of course, if a fellow has a saffron streak he will not do it, but believe me a lot of them in this town wish they had had the nerve to do it.

I came back four years ago with practically nothing, and at the present time have the classiest dental office in the town, both outside and inside. Before the depression set in it was worth not less than \$25,000, building alone, and mine too. We are now riding in our fourth car and it's not a Lizzie either.

What is the reason of this success? Delivering the goods at fair cost; quick service; all the equipment necessary to do modern dentistry, including oxygen gas and X-ray, and getting paid for the work every time a patient leaves the chair.

When a patient calls for an examination he gets a free estimate for work, and I figure how long it will take to do the work, and offer a statement like this to the patient: The work will cost \$50. It will take five visits and if convenient to you, you can pay \$10 each visit. Nine

out of ten say "go ahead." I have a reputation for quick service and the fact that they keep coming leads me to believe that the work is right.

Any dentist who cannot tell how long a piece of work will take is a poor man at his work. Get an X-ray machine for abscessed teeth, and if the root is smooth and not necrosed it will generally take about two or three treatments for a seeming cure. If it is rough and necrosed it is different, but that is the reason for the X-ray investment.

Yes, we find dentistry mighty interesting since we got going, and it is sweet to think of the overall job, the grease and sweat and what it is now, but boys it would be better all round if you will stop doing this credit stuff. Think how much more business I would get if they all required cash! Just think it over and you will admit that when you pay cash you are expecting the real thing, and an inferior grade of work or service is often accepted when it can be obtained on time payments.

Another item which I find profitable is doing my own crown and bridge-work. I have had two bridges made outside in the time I have been in practice. Quite a saving.

Free Examinations of the Past vs. Diagnosis on a Productive Basis

By Harry J. Bosworth, Chicago, Ill.

There is a constantly increasing demand made upon the dentist for examinations and diagnostic services, and having in mind the customs of the past, i.e., Examinations Free, and comparing these examinations of years gone by with the diagnosis of today, which also compare favorably with the examinations by the physician in the past, namely, thermometer, pulse and tongue, compared with the physical diagnosis of today and all it stands for, I feel that the modern oral examination merits careful consideration. Since the advent of the X-Ray and the dentist's knowledge of the relation of the teeth and mouth conditions to health, nothing but a complete set of pictures, a study-model articulated, together with a thorough clinical examination case history will answer the demand for dental diagnosis; this service is worth a real professional fee, and the patient will willingly pay for same. And having in mind the lack of courage on the part of dentists to back away from the habits and customs of the past, i.e., Examinations Free, and ask for a diagnostic fee, and realizing that in order that the diagnostic fee, in fairness to the dentist, must be put on a productive basis, I would suggest that the following letter be mailed to every patient whose name is or has been on your books:

My dear _____:

In all fairness to my patients and myself so that all possible chances for misunderstanding will be avoided, I take this opportunity of announcing that all examinations or diagnostic work which I am called upon to care for must carry with it a fee in accordance with the service rendered. Since the question of the teeth and mouth conditions are so closely allied with other physical ailments and general health conditions, the examinations with merely the mouth-mirror and explorer will not suffice; the X-Ray, study-model and plenty of time devoted to the clinical examination will be necessary. I trust that should you need the service you will appreciate the dentist's position when this difference of the examination of days gone by compared with the diagnosis of today is considered.

Something such as this letter to all of your patients would care for the question of getting a fee for diagnostic services as compared with the Examination Free of the past. In order that the complete set of X-Rays of the mouth may be possible, I am in favor of taking the pictures at a low fee so there will be no question raised on the part of the patient which will prevent the getting of all pictures needed; in other words, treat the mere taking of the pictures as a technician's efforts, to be paid for as such, and when the question of the reading of the pictures comes up the professional application takes place and a diagnostic fee becomes possible and proper. A dental assistant can learn to take pictures and take good ones too, and she can easily, in the average professional working hours, take, develop and mount twelve (12) full mouths; so on a basis of five dollars for the mere technician's duties she can gross fifteen thousand dollars each year; and by this plan the dentist gets all the pictures he needs, which is a wonderful foundation for all diagnostic service. I believe in making it possible to get all the X-Rays necessary, without a protest or feeling on the part of the patients that they are being exploited merely for profit.

The writer has given this question a lot of study and while it is not my intention to deprive the dentist of his better fee, I do feel certain if the getting of the pictures is put on the basis of what is a technician's work, that when the application of the services of the dentist takes place a diagnostic fee is in order and will be paid cheerfully. The lower fee is profitable and makes all needed pictures possible without protest on the part of the patient. Some men never mention the fee for taking the pictures, but take them as needed, as any other necessary routine would come up and when the fee is set up the pictures are taken into consideration as part of the professional service rendered. Any plan that will make it possible to get pictures when you need them, without protest from the patient, "is good prac-

tice." The taking of X-Rays for many reasons belongs in the dental office of the man doing the work. There can be no objection against it and many in favor of it. Handling examinations at a profit will take a lot of the non-productive work of the past out of the dentist's daily efforts.

Co-operation or Competition?

By W. Haywood Johnson, Lynchburg, Va.

Free competition, free contract, and personal freedom for all men is the gift of high civilization.

The law of competition applies generally to all human activities, just as the law of gravitation governs universally the physical world. Under the stimulus of rivalry the competitor will normally do more than merely try to maintain himself, he will exert himself to achieve a positive success and to excel his rival. The effect, therefore, of competition is to quicken the energy, to develop the powers and to render more efficient the action of each party to the competitive struggle and so far as it has this effect it is wholly and unqualifiedly beneficial. Competition is also beneficial in so far as the object of it is to promote the public welfare. It is true of every competitive struggle that on the whole and in the long run he succeeds best and best serves his own interests who best serves the interest of his fellowmen. The chief merit of competition lies in its stimulating effect upon human energy.

We might say the above applies to restrained competition, but what of unrestrained competition? Since the time of Adam the prevailing doctrine in the sphere of human industry has been the "survival of the strongest," of the man who could take things from other men, land or other property, goods, trade, etc. Unrestrained, cut-throat competition has been the rule. Competition became fiercer with every improvement in facilities for the exchange of information. Increase in property was the material good sought by every competitor. To win this the requirements of the moral law did not prevail. Sharp practices became the rule rather than the exception. The successful competitor was one who felt no restraint from conscience. These causes combined to compel individuals to co-operate for the purpose of affording each other protection against the methods employed by less fair competitors. There have always been some men who did not wish to gain at the expense of others, but only when they created something or rendered service. Bitter experience of individuals and groups has taught many more that the most intelligent selfishness lay in co-operation, and hence

unrestrained competition has gradually been displaced by *co-operative* competition.

As men have learned to emphasize their animal nature less and their spiritual nature more co-operation has increased, and all must recognize the trend towards co-operation and act accordingly. Experience has taught men that the law of action and reaction applies to human relations as well as to physics and chemistry. If a professional or business man or worker is suspicious and jealous of his competitors, they will be suspicious and jealous of him; unfair competition reacts in unfair competition. On the other hand confidence reacts confidence, frankness reacts frankness, fairness reacts fairness.

It is the increasing appreciation of the workings of this law that has led to the increase of co-operative methods, organizations and institutions. Men have learned from fierce struggles that they have many common interests with their competitors. They have learned that they cannot gain permanent profit at the expense of a competitor. The business man under modern conditions does not have to choose between competition and co-operation. He already has the first, but he must acquire the second or be forced out of business. Competitive co-operation may come in the future, but *co-operative* competition is here today and is rapidly displacing unrestrained competition.

Co-operation between civilized men is a life-giving necessity for the development of individual intelligence and character and ability. It is a means by which the least capable can acquire intelligence and share in the profits made possible by the skilful management of the most capable. It is a natural and an intelligent development of individualism because it protects, aids and develops individual interests in ways that can never be acquired by any person working in isolation.

616 Church Street.

The Legal Field of Dentistry

The legal field of dentistry is an important question—more important today than at any period in the history of our profession. During the earlier years of dentistry, the dentist confined his knowledge and the scope of his operations strictly within the oral cavity; but year after year the field has widened until now the dentist and the physician are so interlocked in their interests and inquiries, as to make it difficult to determine where the legal field of the one ends and the other begins. Indeed, the legal definition of dentistry is difficult to formulate. May we venture the following, which is not altogether original, nor yet ideal, but which we think covers the field fairly well?

"A legally qualified dentist, besides having the care of the teeth and oral cavity when sound and healthy is entitled in his practice to diagnose and treat any of the lesions of the oral cavity, teeth, gums and maxillary bones; to correct fractures and all mal-positions of the human jaws and teeth; to supply substitutes for lost tooth tissue and adjacent parts; to administer anesthetics, general and local; to administer or prescribe such remedies (medicinal or otherwise) as shall be needed to assist him in the treatment of dental and oral diseases, and the maintenance of the mouth in a condition of health."

The point where the dentist of today is most likely to get beyond his legal depth, and infringe upon the domain of the general physician, is in the matter of "prescribing such remedies (medicinal or otherwise), as shall be necessary in the treatment of dental and oral diseases, and the maintenance of the mouth in a condition of health."

There is no doubt, however, that in following such a line of practice, if he is careful to confine himself to the prescribing of such specified remedies, he is legally and ethically on proper ground. As a matter of fact, the dentist is in duty bound to prescribe such internal remedies, and give such advice, as shall in his judgment assist him in the treatment of oral lesions. For example, he should, where indicated, give advice as to the proper diet; he should when necessary prescribe proper internal remedies in a case of excessive hemorrhage after extraction or in an acute case of pericementitis, etc., etc., it being understood, however, that such advice and prescribing are for the definite purpose of retaining or restoring the oral cavity to a healthy condition. Beyond this he is not legally entitled to go.

Some years ago an able and prominent Canadian jurist, the Hon. David Mills, was asked to give his opinion on this important matter, for the guidance of the dental profession. We quote it here in full:

"A Doctor of Dentistry may practise medicine in so far as his medical treatment is incidental to his profession as a dentist. In this respect he stands in the same relation as a surgeon who is entitled to practise medicine in so far as his medical treatment is called for on account of a surgical case. Thus the dentist may find that the infection of the teeth is due to a constitutional condition of his patient, and would thus be entitled to treat his patient medically to relieve pain. If all the teeth appear sound, he must consider whether his duties are not to treat the case constitutionally by the use of medicine rather than surgically by the forceps. He is, as far as the treatment of the teeth is concerned, a mechanic, a surgeon and a physician, and the responsibility rests on him in every case to decide in what capacity he must act."

This opinion is quoted expressly for the purpose of drawing attention to the danger that lurks in the wording of it. If the legal mind that formulated this opinion had possessed the same knowledge of dentistry as of law, the phraseology would doubtless have been more clearly apprehended by the average dentist. In this opinion the jurist would seem to have forgotten, for the time being, that the general surgeon is also a graduate in medicine, and the dental surgeon is not necessarily so. We might be led to conclude from this opinion that the dentist, upon discovering symptoms in the oral cavity of a serious lesion of the kidneys, for instance, would be equally justified in turning his attention to those organs, make his diagnosis and prescribe the necessary treatment. It is needless to say that the dental practitioner is neither justified by law nor by his training to practise upon such lines.

In all cases where the dentist finds serious systemic complications relating to either the diagnosis or treatment of oral conditions, the family physician should be called in consultation that the patient may be given advantage of the best possible advice and treatment.

There is no doubt that the work of the dentist and the physician will, as time goes on, become more and more interwoven. The wise and skilful dentist who has the care of his patient at heart will run little danger of trespassing on the domain of the general practitioner, while at the same time doing full justice to his professional qualifications and the powers conferred upon him as a dental surgeon.—**ORAL HEALTH.**



CORRESPONDENCE

Editor of DENTAL DIGEST:

Through the DENTAL DIGEST, I wish to warn thousands of dentists who are using Novocain as a local anesthetic. I believe that it is not a practical anesthetic for a dentist, or anyone else for that matter.

Novocain will produce Dermatitis in due time, no matter how little one may come in contact with it. I have had a great deal of experience with this anesthetic and find that at first it will produce redness and irritation. The skin becomes very scaly and painful. To overcome such an effect on the hands it is necessary to discontinue the use of Novocain or use rubber gloves and even with these it is not safe to come in contact with it.

JAMES S. MILLER, D.D.S.

400 More Answers Needed

In the May issue of the Digest, it was explained in considerable detail that it would be worth while to endeavor to show what the average gross income, from the practice of dentistry, was and the relation between gross income and gross expense.

In reply to the request that men who were interested should note their gross expenses and receipts for the year 1920 on a card and send to me, 600 replies have been received. They range from gross annual receipts of about \$2,000 a year to gross annual receipts of more than \$50,000 a year.

In getting them ready for some articles in which I hope you will be interested, and from which I hope some may profit, I am trying to divide them into classes by \$5,000: that is, one class up to \$5,000; the second class from \$5,000 to \$10,000, etc.

If 400 more replies could be received, making 1,000, it would give a broad enough basis so that we might safely draw a few deductions and have something worth while as a subject for intensive study.

Will those of you who are interested, but who have not yet sent in replies, please do so as soon as possible? Merely write your gross annual receipts and gross annual expenses for 1920 on a card, sign it or not, as you like, and mail to me. Each answer will be kept confidential so far as the identity of the dentist is concerned.

To all those who have sent replies, hearty thanks are extended, and it is hoped that the results may justify the trouble that has been taken. Address your replies to George Wood Clapp, D.D.S., 220 West 42nd St., New York City.

Dental Secretaries, Hygienists and Assistants

Announcing a New Department



MONG the articles submitted in response to the prize offer in the June Digest were some of such evident economic value that beginning with this issue a department will be devoted to articles of interest to secretaries and assistants, and articles by them.

Many dental secretaries desire to improve the quality of their service, but cannot easily learn just what other secretaries are doing. Many dentists desire secretaries who can assume additional responsibility, but do not know how to organize the work. Young women are constantly taking up the work with insufficient direction. These articles will benefit all.

Letters accompanying some of these articles state that in certain localities dental secretaries are forming societies which meet at the same time as the dental societies and that some of the addresses were by dentists. This magazine will be glad to act as a medium of publication for articles, suggestions, questions, etc., by secretaries and assistants.

Dentists who are seeking to improve the economic administration of their offices will do well not to overlook this department.

The prize winners in this contest were as follows:

FIRST PRIZE

GOLDEN HOUSTON, 526 Second National Building, Akron, Ohio.
HELEN N. JOHNSON, 2483 Tiebout Avenue, Fordham, New York.

SECOND PRIZE

MARION GRUELLE, 308 Bankers Trust Building, Indianapolis, Ind.

THIRD PRIZE

CONSTANCE LONGCOR, Newton, New Jersey.

FOURTH PRIZE

PEARL MINERS, 674 Dundas Street, Toronto, Canada.
INA M. YATES, 629 Jefferson Building, Peoria, Illinois.
BEULAH S. HYTEN, Trenton, Missouri.
JULIETTE SOUTHARD, 174 West 96th St., New York City.
OLIVE C. ROGERS, Riverside, California.
A. H. PHILLIPS, 881 Lafayette Ave., Bridgeport, Conn.
ELIZABETH M. RALSTON, 905 Bessemer Building, Pittsburgh, Pa.

Methods I Have Found Valuable in the Conduct of a Dental Office

By Golden Houston, Akron, Ohio

FIRST PRIZE ESSAY



HIS opportunity to write and detail my practical experience and opinions in the conducting of a good ethical office, is a great satisfaction to me, in that in this way I may enable others to benefit by my experience.

I have been employed as dental secretary for some six years, and I find that having worked hard and diligently and having in mind at all times the interest of my employer, I have succeeded in learning things that are invaluable to me in my work as well as a benefit to my employer. I have felt for some time that it is my duty to give others the benefit of my experience whenever the opportunity presents itself. With this object in view the dental assistants in many districts are arranging a Society to be called *The Dental Assistants' Society of Summit County*. The object of this Society is solely to enable the assistant to attain a higher standard of efficiency. Many of the dentists heartily approve and have promised their co-operation.

The first thing to remember when entering upon the duties of a dental secretary, is that although the dentist who employs you has outlined your duties and has told you how he wishes to have things done, your obligations do not end there by any manner of means. The dentist is a busy man, and as I have said he outlines your duties and then it remains to you to not only carry out his wishes to the best of your ability, but to study and improve upon them whenever and wherever possible.

I am going to try to take each of the most important duties of a dental assistant in turn, and give briefly the methods I have found most practical.

The first impression made upon the patient upon entering the dental office is usually a lasting one. Therefore the reception room should be neat and in order at all times.

The assistant should wear a neat uniform of white. The most practical and attractive one I have found is made up of the regular plain lady's shirt (which can be purchased in any department store), regular detachable nurse's collar and white apron fastening in the back in the form of a skirt. The separate waist and apron are much more easily laundered than the one-piece uniform. Plenty of starch in a uniform will help to keep it clean and also add to the appearance.

Approaching a patient, in my opinion, is the most important duty of an assistant. Always approach a patient with a smile and a pleasant greeting. If the patients are known to you always call them by name, and make it a point to remember names. You may then ask them if they have an appointment; if they have not they will usually state their business and give their name, which you can convey to the doctor. Then you may either make an appointment or tell them how long they must wait, as the case may be. If the patients enter the office with a grievance, as they inevitably do at times, and insist upon telling you, listen courteously, then as you are not supposed to know why a filling has come out, or a bridge has come loose, etc., do not make excuses or argue about it. Simply say you are very sorry that such is the case and that the doctor will see them as soon as possible. Make patients like you, and make them feel that you take a personal interest in them, but never become familiar or hold long conversations with them. Your time should be too valuable to spend in this way.

In answering telephone calls always speak in a pleasant tone of voice, and avoid abruptness. In brief, be tactful and courteous at all times. □ VIII

The next thing to be considered by the assistant is the duties in the operating room, which are both varied and numerous. An assistant can improve the appearance of the operating room 100 per cent by simply studying it as she would her own home, thereby giving that touch of neatness and order.

For instance, all medicine bottles should be neatly labeled and kept bright and clean. Dusting them over with a damp cloth each morning when arranging cabinet will keep them so. If cabinet drawers are not lined with white, either white paper or napkins should be substituted. Once a week should be often enough to change these. A white napkin placed here and there, for example under instruments left exposed for convenience, over a scarred bracket table, etc., will also help to effect the desired result. Instruments may be kept clean and free from rust by sterilizing in a solution of borax water, drying and polishing immediately after boiling. Never allow instruments to remain in sterilizer.

I do not approve of placing a formidable array of instruments where they meet the patient's eye upon being seated in the operating chair, because the average patient is a little nervous and apprehensive, to say the least, and this does not tend to place him at ease.

Place a pair of cotton pliers, a mouth mirror and an explorer near to hand, and keep all other instruments out of sight until it is necessary to use them.

I have found it very hard to keep nickel on operating chairs, engine, etc., clean. A good furniture polish should be used in cleaning all wooden surfaces at least twice a week; dusting carefully every morning

will keep them in good condition the remainder of the time. In polishing nickel surfaces, sterilizer, etc., a dry polishing powder will give better results than any other.

In brief, let your motto for the operating room be, "Keep everything bright and shining at all times."

After placing a patient in the chair and before the doctor approaches, fasten a clean towel and apron around him and adjust the chair comfortably. Any assistance the doctor requires when operating upon a patient should be rendered quietly and with precision. Do as little talking as possible. Watch closely and render any service which you think will aid the operator or add to the comfort of the patient, effacing yourself as much as possible in doing so, because nothing will annoy or irritate an operator more than to have someone bustling around and getting in his way while he is working on a patient.

Try to master the art of preparing amalgam for fillings, mixing cements, synthetics, etc., to just the right consistency at the earliest possible opportunity, because it saves the dentist many valuable minutes.

Caring for a nervous, high-strung patient requires much tact and patience on the part of both dentist and assistant. I have found that while the dentist is operating upon a patient of this calibre, I could do much toward quieting him and keeping him under control by placing a hand lightly upon his arm at intervals, speaking a few words in a quiet, cheerful voice. In case a patient faints do not become excited and make a great commotion. Absolute quiet is necessary at such times. Simply place the patient in a reclining position and apply cold cloths to the face or forehead, and administer smelling salts. This will usually restore him immediately.

The average dentist depends largely upon his secretary to take care of the business end of his practice, such as collections, expense, buying supplies, etc. In the first place every dentist should adopt some good system whereby it will be easy to keep account of all work done for patients each day. He should take an examination blank with him to the chair and make note of all work to be done for new patients (and estimate, if one is given); then the secretary may take charge of these slips and transfer each to a card filing system at the end of the day, together with payments made. All payments made to be entered in a book when receipt is given. Then when a patient enters who has a card, place card where the doctor may mark the work as it is done; in this way there are no mistakes made. The secretary should take charge of all payments and keep account of them. When patient's work is completed it should be referred to the secretary, who must be capable of collecting all bills without troubling the doctor. I have found that collections are more prompt when handled in this way, because the friendly and professional manner which every good ethical practitioner

adopts in caring for a patient cannot be gracefully changed into a strict businesslike attitude with any great success. Let me add here that a small business office isolated from both reception and operating rooms will be found very convenient.

I have taken charge of buying supplies whenever my employer was willing I should do so. I make it a point to get price lists from several large supply houses, buying wherever I can get the goods promptly delivered.

There is no reason why a dental secretary cannot learn the greater part of the laboratory work that is to be done, casing inlays, polishing bridges, pouring models, making vulcanite dentures, etc. It is interesting work and will enable her not only to command a much higher salary, but to make her services invaluable.

This work always interested me very much and I have taken advantage of every opportunity to learn, spending all my spare moments in the laboratory watching details, etc., and the result is that now, thanks to the patience of my employer, I do the greater part of the laboratory work. Any girl can do this if she is willing to work hard and not let one failure discourage her. The dentist many times is to blame when a girl does not learn as readily as she should, in that he forgets the number of times he blundered in learning and expects too much of his pupil, scolding and thereby discouraging her at every turn.

The one thing for every secretary to remember is that there isn't any part of her work too hard to perform successfully if she has the will to do so.

In conclusion, here are just a few don'ts which may, if heeded, be timely warnings to some struggling young dental secretary:

Don't take advantage of a good natured employer by imposing upon him. Show your employer the same consideration shown you. Don't imagine your employer, who may be single and good looking, is in love with you simply because he treats you courteously, perhaps kindly driving you home in bad weather, etc., because when you allow yourself to overstep the boundary of strict business relationship you are not only lowering the dignity of your calling, but almost sure to lose your position.

Don't make a practice of holding long telephone conversations with your friends. The telephone is in the office for the convenience of the dentist and his patients.

Don't be afraid to remain in the office after your usual time for leaving, when the doctor is busy. Just remember that when you watch the clock and work just because you have to, you are merely an employee who must be governed by set rules, nothing more.

There is a large field for good, earnest, intelligent young women who wish to take up this line of work. Let us work together.

DIETETICS and HEALTH

The Hygiene of Nutrition*

Many people worry about how to get the foods they like, but few think much about choosing the foods which the body demands. Indeed, if one led an active and normal life and could choose freely among the foods he likes he could, to a large extent, rely upon his natural taste to select the proper diet. To select a diet scientifically or to know where the unscientific method breaks down, however, we must understand the nutritional needs of the body.

Water makes up two-thirds of the body weight and in active tissues like muscle it is three-fourths the total weight. Moreover, the body has a liquid carrier system. The blood and lymph, which are mainly water, carry food to the tissues and remove from them the waste products of combustion. The chief way of eliminating waste nitrogen from the body is by means of the water passing through the kidneys. Every individual knows that in making thirst more painful than hunger Nature has set a very high demand upon the water diet.

VITAMINES

The so-called vitamines, are of a chemical composition which is still unknown. It is evident, however, that there are two types of substances, some soluble in water and some soluble in fat, which are essential to the diet in preventing the onset of certain so-called dietary diseases. They are found in the husks of natural grain, in vegetative tissues like the leaves of green vegetables, and in butter, olive oil, and other natural fats.

DIETARY DISEASES

A dietary deficiency in these substances has been established as a cause of beri-beri and scurvy, and it is thought to be the cause of pellagra.

Beri-Beri is found in Asia among the people who make a large part of their diet of polished rice. It is characterized by progressive emaciation, loss of weight and of strength. There is neuritis, the inflammation of the nerve trunks being followed by degeneration resulting in prostration and frequently in death. This disease has been

* From "Hygiene—Dental and General," by Clair E. Turner. Pub. by Mosby Co., St. Louis.

induced experimentally by feeding birds upon polished rice. The birds showed a typical polyneuritis with inactivity, loss of weight, and muscular contraction. But when fed with an aqueous extract of rice bran the birds immediately recovered. In the same manner the disease among human subjects has been stamped out by using unpolished rice or by introducing a mixed diet.

Pellagra, a somewhat similar disease, has been found to be most common in countries where corn is the chief article of diet and where the husk and germ of the grain are removed before grinding. The disease is characterized with erythema, digestive and nervous disturbances. Sometimes cachexia, muscular weakness and insanity develop. The evidence is not as clear in this case, but here again the disease seems to be produced by a diet of the pure starch of a cereal food to the exclusion of the leafy and vegetative tissues which contain the needed vitamine.

Red Cross Health Statistics

No dentist who in 1917 and 1918 had any professional work among the draft men can be in doubt as to the need for instruction in oral hygiene among school children. Parents do not realize the necessity of it; their own acquaintance with the toothbrush may be of the slightest; and the result is shown in such documents as the records of the Surgeon General's office, which out of every thousand men called for service show 468 defective and 333 unfit for service.

Of course these are not all dental defects, nor are they all caused by defective teeth. But it has been calculated that half of those rejected men would have been strong and well had they been given proper medical and dental attention in childhood, and had each been trained in personal hygiene.

In answer to the challenge implied in these figures, the American Red Cross, at the close of the war, launched a national public health campaign. With its 3,402 chapters and its 17,000 branches it covers the entire country, and it hopes to bring to every community in the United States its message of health.

Already it has done much. It employs in various communities throughout the country, 1,335 public health nurses, who last year made 1,144,692 visits, nursed 499,800 patients and examined half a million school children. In several chapters traveling dental clinics have been established to look after the teeth of the children in rural schools. The public health nurses, who find that the best entering wedge in a new community is the school, have done a great deal for better oral hygiene.

by giving frequent toothbrush drills and by the distribution of tooth-paste.

The health center, which coordinates all the health activities of the community, and from which health influences radiate, is another important factor in the Red Cross program. There are now 260 chapters in which health centers are established, and last year 4,015 health lectures and 780 health exhibits were given. Clinics to the number of 6,264 were also held, and were attended by more than ninety thousand persons.

The army of the disabled keeps growing

In Hospitals under Government care

**The Red Cross is spending
Ten Million Dollars a Year
to help the ex-service man
and his family —**

Annual Roll Call Nov. 11-24, 1921

Moreover, the Red Cross furnished last year 1,726 instructors in Home Hygiene and Care of the Sick Classes, 883 of which were given. 258,710 students were enrolled and 86,570 certificates granted.

The Nutrition Service of the Red Cross is being developed in response to the general awakening to the need for more intelligent application of the principle of nutrition to every-day life.

Physicians' examinations have shown that twenty per cent of the school children of this country are below normal weight. To aid in meeting this situation three Chapter activities have been developed;

nutrition classes for undernourished children, hot lunches for schools, and a course in Food Selection for the mothers.

The service has enrolled up to date, 2,514 trained Home Economics teachers to carry on these activities.

During the past year 22,006 undernourished children have been enrolled in 1,114 classes and 163 classes in Food Selection have been organized, from which 1,587 women have been certificated.

The work of the Red Cross in First Aid is too well known to need explaining. More than half a million railroad employees alone have taken the Red Cross course, and many large industrial and public service corporations, such as the Bell Telephone Co., have made it part of the training of their employees. Last year 5,100 classes were held, 20,172 persons certificated, and 104,495 students enrolled.

No one can ever tell when or where disasters will strike. Their horror lies in their suddenness. In its work of organizing for prompt relief in disasters the Red Cross has established supply bases at various strategic points throughout the country, from which food, medicine, and relief supplies can be shipped at an hour's notice to the affected area. There are 328 chapters which have disaster preparedness committees, so organized that volunteers and supplies and transportation are always available. There were 70 disasters during the past 18 months, and in caring for the dead and injured and providing shelter for the homeless the Red Cross expended \$1,600,000. One hundred and seventy-seven chapters last year had to meet disaster emergencies and 48 chapters rendered aid outside of their own communities.

Of course, at present the chief work of the Red Cross is being concentrated on aid for the wounded soldiers. The highest and greatest obligation that the nation and the American Red Cross face today is the problem of the disabled service man. The number of these men is increasing continually as hitherto hidden disabilities assert themselves and an average of a thousand men a month are reporting for hospital treatment. Many thousands more are scattered throughout the country, and the task which faces the Red Cross is to seek out these men in their homes, advise them of the aid that the Government desires to give them, and in every way assist them in obtaining that aid. There were 26,300 ex-service men in hospitals on June 27, 1921. There are 2,397 Red Cross Chapters which maintain a service for the war veterans, and during the past year 1,508,640 men were given help. Headquarters handled 148,032 allotment, compensation and insurance claims, and delivered 63,655 allotment checks to men who had moved from addresses furnished to the War Risk Insurance Bureau. There are 448 Red Cross workers in government hospitals where the disabled soldiers are under care. And last year the Red Cross loaned \$450,000 to 32,495 men under the Federal Board for Vocational Training.

At the request of the Government, the American Red Cross holds the reserve out of which are recruited the Army and Navy Nursing Corps in time of war.

During the war it assembled, equipped, uniformed and assigned 19,877 nurses to active service with our Armies and Navy.

It holds now upon its list 37,787 registered nurses subject to call. During the past two years it has assigned 1,163 nurses to the U. S. Public Health Service for the care of disabled service men.

It has trained, equipped and assigned 1,335 Red Cross Public Health Nurses to the service of chapters and communities throughout the country.

The public health program, too, must not be allowed to drop. Calls for Red Cross service are more insistent than ever before. The Roll Call—the time during which membership dues are payable—will be held November 11-24, 1921. It is the duty and the privilege of everyone who realizes the necessity for the work, to join.

"Will You Be Alive Next Year?"

Under this rather striking title, the Life Extension Institute, Inc., of 25 West 45th Street, New York City, publishes a full-page advertisement in the New York Times Book Review. The point of especial interest to members of the dental profession is that the advertisement devotes two paragraphs to tooth conditions which read as follows:

"A man may live for years with an abscessed tooth and be unaware of the fact. Yet all the time the poison from this infection creeps slowly through his body, ever gravitating towards the weak spot. Apparently unimpaired he goes his way, until one day the weakened, damaged organ abruptly ceases to function and another untimely death is dedicated to ignorance.

"And of every thousand people whose teeth we X-ray, 58 per cent show root abscesses. Out of 4100 consecutive cases that had routine X-rays, only 76 showed absolutely normal conditions."

Another paragraph states that not 2 per cent of those examined are normal in every respect, and it shows what it calls a "Life Span Chart," the details of which are said to be compiled from actual figures.

This chart shows that the normal life should reach 70 years, but that the average expectation of life at birth is only 51 years. The same chart shows that the average period of working productivity is from the ages of 18 to 42, and the period of good health is from 18 to 31. These facts are quite as interesting concerning the dentist himself as they are when related to any of those whom he serves.

Autumn Days

Yellow, mellow, ripened days
 Sheltered in a golden coating;
 O'er the dreamy, listless haze
 White and dainty cloudlets floating;
 Winking at the blushing trees,
 And the sombre, furrowed fallow;
 Smiling at the airy ease
 Of the southward flying swallow.
 Sweet and smiling are thy ways
 Beauteous, golden Autumn days.

EXTRactions

Science has no enemy save the ignorant.

What you eat today walks and talks tomorrow.

(Customer)—I want a pair of shoes that will feel comfortable on my feet.

(Honest Salesman)—We sell only new shoes here!

(Eve)—What did you think when you first saw me, Adam?

(Adam)—I was puzzled, as I couldn't recall advertising for housekeeper.

(Sign seen on Chicago Boulevard)—Autos will slow down to a walk.

(Sign in London, O.)—Drive slow and see our town. Drive fast and see our jail.

A person who picked up a hornet could only say "Gracious!" and "Durn it!"

What a pity, he mused,

That when young I refused, When I heard a good cuss-word, to learn it.

(Judge to Colored Person)—Are you the defendant in this case?

(Sambo)—No, sah. I hires a lawyer to be my defenser.

(Judge)—What are you, then?

(Sambo)—I'se de gentleman wot sto'e de chickens.

She was telling an acquaintance about her girl friends.

"Yes," she said, "my friend Maud is only twenty-five, but she's been married three times. And all her husbands have been named William."

"You don't say!" replied he. "Why, she must be a regular Bill collector!"

When the agent brought Mrs. Tarley her fire-insurance policy he remarked that it would be well for her to make her first payment at once.

"How much will it be?" she asked.

"About one hundred dollars. But wait a minute and I'll find the exact amount."

"Oh, don't go to any bother," she exclaimed. "Tell the company to let it stand and deduct it from what they will owe me when the house burns down."

A number of tourists were looking over the inferno of Vesuvius in full eruption.

"Ain't this just like hell?" queried one of the Yankees.

"Ah, zese Americaines," exclaimed a Frenchman who had overheard the remark, "where have zey not been!"

"Beg pardon, guv-nor," said the tramp—a particularly dirty and objectionable specimen—to a prosperous looking citizen. "Would you give half a dollar to improve and beautify your town?"

"What's the idea?" was the non-committal and suspicious response.

"Why, for two glittering quarters I'll move on to the next village," the objectionable one explained.

He got the money.

Two men were waiting for a train and one said: "I will ask you a question, and if I can not answer my own question, I will buy the tickets. Then you ask a question, and if you can not answer your own, you buy the tickets." The other agreed to this. "Well," the first man said, "you see those rabbit-holes? How do they dig those holes without leaving any dirt around them?" The other confessed: "I don't know. That's your question, so answer it yourself." The first man winked and replied: "They begin at the bottom and dig up!" "But," said the second man, "how do they get at the bottom to begin?" "That's your question," was the first man's rejoinder. "Answer it yourself." The other man bought the tickets.

Here is a singular incident showing how easy it is to mistranslate an overheard remark.

Said Mrs. A., one of the overhears: "They must have been to the zoo, because I heard her mention a trained deer."

Said Mrs. B.: "No, no. They were talking about going away and she said to him, 'Find out about the train, dear.'"

Said Mrs. C.: "I think you are both wrong. It seemed to me they were discussing music, for she said, 'A trained ear very distinctly.'

A few minutes later the lady herself appeared and they told her of their disagreement.

"Well," she laughed, "that's certainly funny. You are poor guessers, all of you. The fact is, I'd been out to the country overnight and I was asking my husband if it rained here last evening."

SOCIETY and OTHER NOTES

The Licensing of the Dental Hygienist

REQUIREMENTS FOR ADMISSION TO THE COURSE FOR DENTAL HYGIENISTS

Numerous requests for information have been received concerning the new law providing for the licensing of the dental hygienist and the requirements for admission to the University of California Dental Hygiene Course.

The following brief outline summarizes the requirements of both the law and the course.

THE LAW

1. Any persons over eighteen years of age shall be eligible to take an examination before the Board of Dental Examiners of California as Dental Hygienists upon making application therefor.
2. The fee for the Board examination is fifteen dollars.
3. Each person shall present evidence of graduation from any legally incorporated dental college, dental infirmary, or any other institution of equal standing which maintains a course of instruction for dental hygienists equivalent in all respects to similar courses of instruction maintained in the University of California.
4. Each person shall present evidence that he or she is at least 18 years of age, of good moral character, and complied with all the requirements of the statute.

The examination requirements include the elements of Inorganic Chemistry, Physiology, Anatomy, Bacteriology, Anesthesia, Radiography, Materia Medica, Dental Histology, Principles of Nursing and Hygiene, and a practical examination in the removal of deposits and the polishing of the exposed surfaces of the teeth.

Each dental hygienist on being licensed must register and pay an annual tax of two dollars on or before the first day of May.

Any licensed dentist, public institution, or school authority may employ such licensed and registered dental hygienist, who may remove only accretions and stains from the exposed surfaces of the teeth under the direction or supervision of a licensed dentist.

THE DENTAL HYGIENE COURSE

A graduate of a California high school may enter the University of California without examination provided the following requirements be satisfied:

1. The school must have been accredited by the University of California.
 2. The applicant must have completed a four-year high school course, aggregating at least 15 standard units of preparatory work, (the equivalent of 45 units by the scale heretofore used), and he must be duly certified as a graduate of the school.
 3. The candidate must be recommended for admission to the University of California by the principal of the high school. (Recommendation Form A.)
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Meeting of the American Chemical Society

New achievements in fields of chemistry and physics hitherto unpenetrated—developments that will not only offset the great destruction of capital during the World War, but will open up a new era, in which the sun's light, the tides, the earth's rotation and the atomic energy in ordinary matter will be transmuted to an extent little dreamed of—were predicted by chemists, at the international meeting of the American Chemical Society, recently held at Columbia University, N. Y. City. These are some of the prophecies:

Conversion of the solar rays—now wasted energy—to supplant the dwindling supplies of coal, petroleum and other sources of present energy.

The production of "cold light," such as is seen in the firefly, making possible an enormous decrease in the power necessary for lighting purposes.

Increased yields in chemical synthesis by a better utilization of the possibilities of catalytic action—the acceleration of reactions by substances which themselves remain unchanged.

Methods of causing rain-clouds to precipitate.

Increased development of tidal power in favorable locations.

Wider employment of the energy of the earth's rotation, thus far used only in the application of the gyroscope.

New energy from the sun and from the tiny atom itself was predicted by Dr. Arthur D. Little, an industrial chemist of Boston.

"We are cognizant," he said, "of sources of energy inconceivably greater than any possible requirement of the human race. There is to be considered, first of all, the radiant energy of the sun, of which Lodge

assures us the earth receives only one one-hundred-and-fifty-millionth part. It seems too little to talk about. It is only three small calories per minute per square centimeter of the earth's surface. But Ciamician has calculated that a surface of only 10,000 square kilometers receives in a year, assuming only six hours as the effective day, a quantity of heat that corresponds to that produced by the burning of 3,650,000,000,000 tons of coal. That is considerably more than double the entire world production."

Dr. Charles Baskerville, Laboratory Director of the College of the City of New York, said:

"Of extraordinary interest to chemists are the accumulating evidences of inconceivably great amounts of kinetic energy possessed not only by radium but by ordinary matter as the constitutional energy of its atoms. We now recognize that concealed in matter of every kind are stores of energy immensely greater than those derived from chemical reactions or concerned with any of the forces with which we commonly deal. We recognize them as of an altogether higher order of intensity and magnitude than the energy derived from burning coal or liberated from the most powerful explosives.

"So stupendous and far-reaching are the possibilities contained in the suggestion that we may ultimately be able, without destruction, to draw upon this energy supply.

"If we could produce what is popularly known as cold light, equaling the firefly without adopting his methods, that would make possible an enormous decrease in the power necessary for lighting purposes. Cold light will come some day and we know enough now to predict that we shall make use of a catalytic agent to speed up the reaction which gives rise to the light. If we could cause the rain clouds which now pass tantalizingly over many of the arid regions to precipitate, we could increase the fertility and consequently the value of these lands to an unbelievable extent. This is not 'rain-making' in the popular sense, but is a matter which is quite within the limits of accomplishment.

"I do not know to what extent or when the chemist is going to make available the energy in the sunlight or the atomic energies which have been made manifest to us by the properties of the radio-active substances; but I do know that these things, when they come, will involve catalysis. It is because we cannot speed up atomic disintegrations that we cannot utilize the energy locked up in the atom. Vitamines are a mysterious set of substances which certainly act catalytically if we make our definition broad enough. I do not see how they can ever be used to generate power directly; but we are only just beginning to appreciate the part they play in the health of the individual. If we can raise the standard of general health and can decrease the amount

of sickness we shall have done more for the happiness and prosperity of the world than could be accomplished by almost any accumulation of capital. This is one of the most important of the problems that confront the chemist."

Some of the Sing-Songs

The following parodies were sung at the Banquet of the National Dental Association, held at Milwaukee, August 16, 1921:

TUNE—SMILES

There are teeth that are worth filling,
There are teeth that are O. K.
There are teeth so full of mighty caverns
That to fill them up it does not pay.
There are teeth that set a fellow guessing,
Both the owner and his doctor too,
So that's why we hold these fine conventions,
To help us think right and help us do.

TUNE—REUBEN, REUBEN

Doctor, Doctor, how I suffer;
Oh! Oh! Oh! I'm in such pain.
Every tooth I've got is aching,
Stop 'em quick or I'll go insane!

Patient, Patient, oft I told you
Come more often for my care.
But you thought you knew your business,
Now you're getting your full share!

TUNE—MY BONNIE

My Molars have all been extracted,
My front teeth have been pulled out too,
I had a bad pain in my liver,
Wise M. D.'s said this must I do.

Bring back, bring back,
Bring back my ivories to me, to me,
Bring back, bring back,
Oh bring back my grinders to me.

TUNE—I'M FOREVER BLOWING BUBBLES

We're forever filling hollows,
Filling hollows is our game;
We'd have you know
This is ever so—
By filling right we gain and grow.
Teeth are ever crumbling
No two quite the same—
We're forever filling hollows,
To fill rightly is our aim.

I'm forever being tortured,
I'm forever being stung,
The doctor's bill and the dentist's drill,
How they do hurt but never kill,
Doping and a grinding,
Going deep. Gee whiz,
I'm forever being tortured
May the Doc some day get his.

The American College of Dentists**Statement of Objects and Requirements for Fellowship**

Every important profession, science or art has its Academy, Legion, or Court of Honor, to which are elected, or appointed, those who have unselfishly devoted themselves to the advancement of each specific cause. This has been done not only as a just recognition of meritorious services, but also as an example to younger members that they may be encouraged to nobler efforts.

Recognition of the need of a similar influence in dentistry has resulted in the establishment of the American College of Dentists. The object of this College is to bring together in a group the men of outstanding prominence in the profession and by their united efforts in a field that is not now covered by any dental agency to endeavor to aid in the advancement of the standards and efficiency of American Dentistry. Some of the aims of the College are to cultivate and encourage the development of a higher type of professional spirit and a keener sense of social responsibility throughout the profession; by precept and example to inculcate higher ideals among the younger element of the profession, and hold forth its Fellowship as a reward to those who faithfully follow such ideals; to stimulate advanced work in dental art, science and literature; and to honor men who have made notable contributions to the advancement of our profession.

The enormously increased responsibilities of the dental profession to humanity on the one hand; the unprecedented opportunities for exploitation, which have resulted in a wave of mercenary practices that threatens to become a public scandal to the everlasting disgrace of American Dentistry, on the other hand, demand that those elements of the profession, whose character, reputation and professional attainments point them out as leaders, should be brought together for the purpose of checking the tide of destructive agencies and of encouraging by every laudable means the cultivation of that high spirit of professional and social responsibility, the wholesome influence of which is so greatly needed.

Inasmuch as there is no title or mark of distinction to differentiate the recent graduates from the practitioner who has devoted many years of faithful effort in the upbuilding of his profession, it is proposed that the Fellowship of the College shall be conferred upon two groups of practitioners, viz.:

1. Upon those members of the profession who have been at least ten years engaged in the practice of dentistry, whose efforts during that time have been loyally devoted to its advancement, and who are unquestionably looked upon as leaders in their respective communities. Time and effort devoted to teaching in dental schools, to presenting papers, or clinics before dental societies, or to organization and executive work of a constructive character; as well as public services or civic duties having a tendency to enlarge the usefulness or the public appreciation of dentistry, shall be taken into consideration when passing upon candidates of this group.

2. The conferring of the Fellowship shall be held out as a stimulus to young men to induce them to engage more earnestly in those activities which tend to advance dentistry as a profession and for which monetary remuneration must necessarily be sadly out of proportion to the time and effort expended. Devotion to teaching, especially in the non-clinical branches; to research work and to public education, as well as advanced work in the art, science or literature of dentistry, should be greatly encouraged as a consequence of this movement.

The candidate for the Fellowship in either class must be of good moral character, and have a reputation for ethical conduct and professional standing that is unquestioned. Personality, integrity, education, unselfishness, and high professional ideals, as well as freedom from mercenary tendencies, shall be considered in evaluating the qualifications of all candidates for the Fellowship.

FUTURE EVENTS

THE SUSQUEHANNA DENTAL ASSOCIATION will hold its Fifty-eighth Anniversary in the Armory, at Easton, Pa., on October 18, 19 and 20, 1921. There will be a three-day Post-graduate Course in Conduction Anesthesia and a Progressive Clinic in the course of the meeting. Important papers by well-known members of the profession will be read and discussed.

THE PUBLICITY COMMITTEE,
J. EVAN HIRTLE, *Chairman.*

THE DENTAL COMMISSIONERS OF CONNECTICUT will meet at Hartford, November 17th, 18th and 19th, 1921, to examine applicants for license to practice dentistry, to examine dental hygienists for license to practice, and to transact any other business proper to come before them. For further information address

ROBERT H. W. STRANG, *Recorder,*
886 Main Street, Bridgeport, Conn.

THE IOWA STATE BOARD OF DENTAL EXAMINERS will meet for the purpose of examining candidates for a license to practice in Iowa, at Iowa City, College of Dentistry, beginning Monday, December 5th, 1921, at 9:00 A. M. For further information and application blanks, address

DR. C. B. MILLER, *Secretary,*
726 Fleming Bldg., Des Moines, Iowa.

The annual clinic of the CHICAGO DENTAL SOCIETY will be held at the magnificent new Hotel Drake, January 19, 20, 21, 1922.

This hotel is peculiarly well adapted to the needs of a large sectional meeting as has been planned for this occasion. Many commodious soundproof rooms will be provided for the lectures and demonstrations, while the space for the general sessions and exhibits will meet all requirements, and is ideal in every particular.

The program, which will be announced at a later date, will surpass anything yet attempted by this component society.

For convenience, out-of-town guests should make their reservations at the Drake, and they should be made as early as possible as there will be a large attendance from outside Chicago. All ethical dentists are cordially invited. For further information, which will be cheerfully given, address

M. M. PRINTZ, *Secretary,*
25 E. Washington Street, Chicago, Ill.